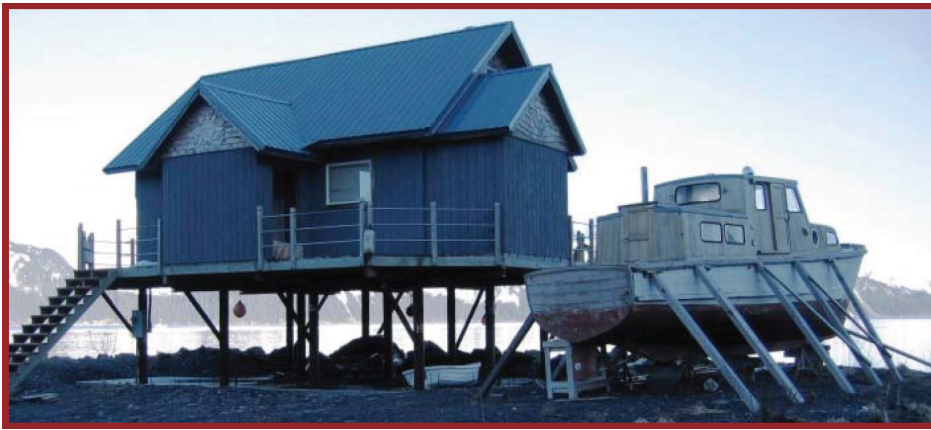


Appendices:

Alaska Mapping Business Plan



September 2017



State of Alaska
Department of Commerce, Community,
and Economic Development
Division of Community and Regional Affairs



State of Alaska
Department of Commerce, Community,
and Economic Development
Division of Community and Regional Affairs



Galena 2013



Matanuska-Susitna Borough 2012



Nenana 2008



Nome 2007



Eagle 2013



Emmonak 2005



Eagle 2009



Shishmaref 2001



Aniak 2002



Eagle 2000



Valdez 2006



Shishmaref 2001

Alaska Department of Commerce, Community, and Economic
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APPENDIX 1: ALASKA DATA SUMMARIES

The data acquired for the Alaska Risk Map Data Acquisition, Analysis and Prioritization of Future Study Needs effort is available in two Excel Workbooks: AK_Data_Summary.xlsx and Alaska_RiskMap_Prioritization.xlsx . Some of the data from AK_Data_Summary.xlsx is discussed below and presented in a series of tables that follow in this Appendix.

COMMUNITY IDENTIFICATION NUMBERS BY FEDERAL INFORMATION PROCESSING STANDARDS CODE

The Community Identification (CID) number is a unique 6-digit number assigned to each community that has been identified under the NFIP. The CID number is shown on each FIRM panel and is the first 6 digits of all non-countywide format FIRM panel numbers.

The Federal Information Processing Standards (FIPS) code is the unique 5 digit number that is assigned to each county in the United States (or boroughs in Alaska). This number is made up of a 2 digit state code followed by a 3 digit county code. The FIPS code is the first 5 digits of all countywide format FIRM panels numbers.

Table 1 identifies Alaskan communities by FIPS Code and CID Number order to allow for the correlation of data on Alaska's NFIP-participating communities.

ORIGINAL LOCAL DATA

A NFIP-participant questionnaire was developed to assess data gaps addressed in the first Mapping business Plan (MBP) Goal and its associated Task 1B. The completed questionnaires provide essential data to support MBP updates and/or inclusion within the plan. A review of the questionnaire responses reveals that planning, zoning, geographic information systems (GIS), topographic data availability, and community resource capability or capacity is directly related to the community size, affected population, rural location, and hazard risk. The smaller, more rural communities have severely limited capacity to develop or regulate building construction. However, most all communities do guide land-use to ensure new construction does not occur within known hazard zones. The completed questionnaires demonstrate these building code or land-use regulation and enforcement inconsistencies. This information is presented in Table 2 (see also AK_Data_Summary.xlsx , Tab 2).

STATE DATA SUMMARY

Information on NFIP-participating communities was also collected from a variety of State of Alaska sources. This information is presented in Table 3 (see also AK_Data_Summary.xlsx , Tab 3).



FEDERAL INSURANCE ADMINISTRATION COMMUNITY FLOOD INSURANCE INFORMATION

Flood insurance information contains the number of single claims, the number of policies in effect, the number of repetitive losses, and the number of repetitive loss properties summarized at the borough level. This information is presented in Table 4 (see also AK_Data_Summary.xlsx , Table 5).

LOCAL HAZARD MITIGATION PLANS

The presence of active mitigation plans indicates those communities are proactive in managing flood related risks. Therefore, those watersheds with a high percentage of their areas intersecting communities with mitigation plans in place are usually given a higher priority for future studies. This information is presented in Table 5 (see also AK_Data_Summary.xlsx , Table 7).

HAZARD MITIGATION GRANTS

Participation in FEMA’s Hazard Mitigation Grant Program (HMGP) can give a good indication that a community is willing to mitigate the risks of flood hazards. Data for the communities within the State of Alaska participating in HMGP are presented in Table 6 (see also AK_Data_Summary.xlsx , Table 8).

ALASKA DISASTER DECLARATIONS

A major disaster could result from a hurricane, earthquake, flood, tornado, or major fire which the President determines warrants supplemental federal aid. To be considered for this aid the impacts of such an event must clearly exceed the capability of state or local governments’ resources or capability to manage the consequences alone. If declared, funding comes from the President's Disaster Relief Fund, which is managed by FEMA, and disaster aid programs of other participating federal agencies. This information is presented in Table 7(see also AK_Data_Summary.xlsx , Tables 9 and 10).

LETTERS OF MAP CHANGE

LOMCs, specifically Letters of Map Amendments (LOMAs), can be used as an indicator that a map may need revision. Letters of Map Revision (LOMR) have been excluded from this dataset because, by definition, approved LOMRs already address the mapping need and are the effective NFIP document for the area covered by the LOMR restudies. LOMAs can be summarized on a borough, community, or flooding source basis. This information is presented in Table 8 (see also AK_Data_Summary.xlsx , Table 12).


Table 1: Communities by CID Number and FIPS Code

Community by Borough/Census Area	FIPS	CID
Aleutians East	02013	
King Cove, City		020055
Sand Point, City		020079
Aleutians West	02016	
Unalaska, City		020093
Anchorage	02020	
Anchorage, Mun		020005
Anchorage, City		020117
Bethel	02050	
Akiak, City		020101
Akolmiut, City		020116
Aniak, City		020033
Bethel, City		020104
Eek, City		020043
Kwethluk, City		020130
Mekoryuk, City		020063
Napaskiak, City		020066
Toksook Bay, City		020091
Tuluksak, City		020092
Bristol Bay	02060	
Bristol Bay, Borough		020001
Denali	02068	
Dillingham	02070	
Clarks Point, City		020036
Dillingham, City		020041
Manokotak, City		020062
New Stuyahok, City		020111
Newhalen, City		020067
Mondalton, City		020070
Port Heiden, City		020112
Togiak, City		020090
Fairbanks North Star	02090	
Fairbanks North Star, Bor		025009
Haines	02100	
Haines Borough		020007
Haines, City		020008
Juneau	02110	
Douglas, City		020010
Juneau, City		020009
Kenai Peninsula	02122	
Homer, City		020107
Kachemak, City		020109
Kenai, City		020126
Kenai, City, Kenai Peninsula		020114
Kenai Peninsula Bor/Kenai-Cook		020012
Seldovia, City		020120
Seward, City		020113
Soldotna, City		020014
Ketchikan Gateway	02130	
Ketchikan, City		020003
Kobuk Division	02140	
Ambler, City		020031
Buckland, City		020105
Deering, City		020039
Kiana, City		020054
Kivilina, City		020056
Noorvik, City		020071
Selawik, City		020081
Shungnak, City		020085
Kodiak Island	02150	
Kodiak Island Bor/Kodiak Divis		020016
Kodiak, City		020017
Lake and Peninsula	02164	
Lake and Peninsula Bor		025063
Lake and Peninsula/ City Bor		02164C
Matanuska-Susitna	02170	
Matanuska-Susitna Uninc and Inc		02170C
Matanuska-Susitna Boro		020021
Palmer, City		020023

Community by Borough/Census Area	FIPS	CID
Nome	02180	
Brevig Mission, City		020034
Elin, City		020044
Gambell, City		020046
Golovin, City		020047
Koyuk, City		020060
Nome, City		020069
Saint Michael, City		020078
Savoonga, City		020080
Shaktolik, City		020083
Shismaref, City		020084
Stebbins, City		020086
Teller, City		020088
Wales, City		020095
White Mountain, City		020096
North Slope	02185	
Barrow, City		020026
North Slope Borough		020024
Anaktuvuk Pass, City		020025
Kaktovik, City		020027
Point Hope, City		020028
Wainwright, City		020029
Northwest Arctic	02188	
Kotzebue, City		020059
Prince of Wales-Outer Ketchikan	02201	
Craig, City		020038
Hydaburg, City		020051
Klawock, City		020057
Metlakatla, City		020064
Sitka	02220	
Sitka City and Bor/Sitka Div		020006
Sitka City and Bor All Areas		02220C
Skagway-Hoonah-Angoon	02232	
Angoon, City		020102
Tenakee Springs, City		020089
Hoonah, City		020049
Pelican, City		020073
Skagway, City		025011
Yakutat, City		020099
Southeast Fairbanks	02240	
Delta Junction, City		020040
Upper Yukon	02250	
Eagle, City		020042
Valdez-Cordova	02261	
Cordova, City		020037
Valdes City		020094
Whittier City		020097
Wade Hampton	02270	
Alakanuk, City		020030
Chevak, City		020035
Emmonak, City		020125
Hooper Bay, City		020108
Kotlik, City		020058
Mountain Village, City		020065
Pilot Station, City		020075
Russian Mission, City		020076
Saint Mary, City		020077
Wrangell-Petersburg	02280	
Kate, City		020052
Petersburg, City		020074
Wrangell, City		020098
Yakutat	02282	
Yukon-Koyukuk	02290	
Anvik, City		020103
Grayling, City		020048
Lower Kalskag, City		020061
Nikolai, City		020068
Shageluk, City		020082
Anderson, City		020032
Fort Yukon, City		020045
Galena, City		020124
Huslia, City		020050
Kaltag, City		020053
McGrath, City		020128
Nenana, City		025010
Nulato, City		020072
Tanana, City		020087
Koyukuk, City		020127



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

Table 2: Original Local Data
*Used for 2011 Alaska Risk MAP Prioritization Algorithm

Task Name	City & Borough of Juneau	City & Borough of Sitka	Fairbanks North Star Borough	Haines Borough	Kenai Peninsula Borough	Ketchikan Gateway Borough	Lake & Peninsula Borough	Matanuska-Susitna Borough	Municipality of Anchorage	Municipality of Skagway	Northwest Arctic Borough	Aniak	Bethel	Cordova	Delta Junction	Dillingham	Emmonak	Fort Yukon	Galena	Homer	Hoonah
FRMS: Date of Adoption			1/2/1992	05/01/1987 (U)	12/6/99	4/16/90															
FRMS: Map Update Date	9/9/90	9/29/10	9/20/06	N/A - In Borough Population	N/A - In Borough	N/A - In Borough	N/A - in Borough	N/A - in Borough	N/A - in Borough	Yes - 2004	N/A - In Borough	No - 2001	No - 1981	N/A Population	No - 1980	No - 1981	Yes - 2006	Yes - 2010	Yes - 2009	N/A In Borough	Yes - 2004
IAID (Initiative for Accelerated Infrastructure Development) Maps																					
Erosion Disaster Information																					
Flood Disaster Information	11/26/84, 10/27/98, 12/23/05	11/26/84, 12/23/05	8/1/89, 5/3-23/91, 2/4/00, 5/30/01, 5/21/03, 7/27/08, 5/6/09	7/25/85, 2/29/88, 8/14/92, 10/27/98, 12/23/05	7/22/81, 10/12/86, 8/30/89, 9/21/95, 2/4/00, 11/6-12/20/02, 11/3/03, 2/5-11/06, 10/8-13/06, 3/2/07		2/4/00, 11/3/03, 1/29/04, 10/3/05	12/20/79, 7/22/81, 10/12/86, 8/4/89, 9/21/95, 2/4/00, 5/30/01, 8/08-24/06, 5/6/09	2/10/78, 7/22/81, 8/30/89, 9/21/95, 9/21/95, 2/4/00	11/16/94, 12/23/05	10/23/02, 10/28/04, 9/22-26/05, 11/29/06, 5/6/09	6/15/1983, 5/29/87, 6/10/89, 5/3-23/91, 6/5/95, 5/30/01, 5/6/09	7/10/85, 6/10/88, 7/2/90, 2/4/00, 5/6/09	9/16/83, 10/31/85, 10/12/86, 9/21/95, 8/18/24/06, 10/8-13/06	8/18-24/06	9/2/80, 2/4/00, 10/3/05	2/12/82, 6/15/84, 6/11/85, 6/10/89, 5/3-23/91, 6/5/95, 5/30/01, 7/20/05, 6/7/06, 5/6/09	5/17/82, 5/6/89, 6/10/89, 6/17/92, 5/6/09	6/10/89, 5/3-23/91, 5/26-29/92, 5/10/94, 5/6/09		12/23/05
Occupied Housing Units	12,187	3,545	36,441	1,149	22,161	5,305	553	31,824	107,332	436	1,919	166	1,896	922	377	855	185	246	190	2,235	305
Sewer Facilities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Water Facilities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
2000 Households W/Out Water	1	1	7	16	7	2	14	8	1	6	22	15	10	3	4	7	12	54	37	4	4
Planning and Zoning Powers - Tie to community data	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Community Plans	13	16	8	4	8	5	5	7	8	9	4	3	8	5	5	10	2	3	3	8	4
Staff Planner	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes
In House GIS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mitigation Plans	7/50/10	4/20/10	None	4/8/10	7/13/11	8/17/2010	11/23/05	9/29/08	7/21/11	12/30/09	6/8/09	12/2/05	6/16/08	9/5/08	Date?	3/21/08	7/31/08	8/17/10	6/6/10	9/9/11	1/20/10
CTP Agreements	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
Identify previously unidentified needs (Have you identified potential changes and their impacts?)	Yes	Yes	Yes	No	Yes	Yes	No	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	No	Yes	
Significant climatological changes (Please delineate)	No	Yes	No	No	Yes	No	No	Yes		No	Yes	No	Yes	No	No		No	Yes	Yes	No	
Planned future development	Minor	Yes	Yes	No	Yes	Yes	Yes - minor	Yes	Yes	No	Yes	No	No	Yes	No		Yes	Yes	Yes	Yes	
Digital built environment data availability	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes		Yes	Yes - no staff	No	No	Yes	Yes, limited		No	Yes, limited	No	Yes	
Topographic data availability	Yes	No	Yes, New LIDAR	Yes, New LIDAR	Yes, New LIDAR	Yes, New LIDAR	No	Yes		Yes, Old	No	No	No	Yes	No		Yes, limited	Yes, limited	No	Yes	
Mitigation Grants	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Yes		Yes	Yes		No	Yes	Yes	Yes	
Communities expressed interest in improving existing or development new community plans?	No	No	No	No	Yes	No	No	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	
Risk MAP Conversions	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No



(continued) Table 2: Original Local Data

Task Name	Kotzebue	Koyukuk	Kwethluk	McGrath	Nenana	Nome	Petersburg	Seward	Shishmaref	Togiak	Valdez	Kenai	Soldotna	Wrangell City & Borough
FIRMS: Date of Adoption														
FIRMS: Map Update Date	7/18/83	1/1/50	1/1/50	1/1/50	4/21/99	5/3/10	6/1/82	12/6/99	5/3/10	2/3/10	12/1/83	12/6/99	12/6/99	6/15/82
IAID (Initiative for Accelerated Infrastructure Development) Maps	No - 1976	Yes - 2009	Yes - 2007	Yes - 2009	Yes - 2009	N/A - Population	No - 1984	Unknown	Yes - 2004	Yes - 2003	N/A Population	N/A - In Borough	N/A - In Borough	No - 1984
Erosion Disaster Information									8/5/88, 10/6/97, 10/5-					
Flood Disaster Information	4/30/84, 9/4/90, 8/26/94, 10/23/02, 10/28/04,	6/10/89, 6/5/95, 5/30/01, 5/6/09,	6/10/89, 6/5/95, 5/30/01, 6/7/06,	6/10/89, 5/16/90, 5/3-23/91, 5/23/94, 5/30/01, 7/20/05, 5/6/09,	7/27/08,	9/10/90, 10/5/92, 10/28/04, 5/6/09,		10/12/86, 8/30/89, 2/5-11/06, 10/8-13/06, 12/31/09,	8/5/88, 10/6/97, 10/23/02,	11/23/79, 10/3/05,	10/8-13/06,			
Occupied Housing Units	954	42	172	147	171	1,216	1,252	928	141	231	1,573	2,809	1,720	1,053
Sewer Facilities	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes			
Water Facilities	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes			
2000 Households W/Out Water	7	100	95	8	5	5	2	1	96	38	2			
Planning and Zoning Powers - Tie to community data	Yes	No	Yes		Yes	Yes	Yes	Yes	No	No	Yes			
Community Plans	4	2	3	1	1	5	7	3	10	3	1			
Staff Planner	No	No	No	No	No	Yes	Yes	Yes	No	No	Yes			
In House GIS						Yes	Yes	Yes			Yes			
Mitigation Plans	6/18/08	10/2/08	2/23/10	2/26/09	9/23/10	6/18/08	6/2/08	7/14/11	2/6/11	2/16/11	2/27/08	7/29/11	8/12/11	1/20/10
CTP Agreements	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Identify previously unidentified needs (Have you identified potential changes and their impacts?)	Yes	No	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Significant climatological changes (Please delineate)	Yes	No	Yes		No	Yes	Yes	No	Yes	Yes	No	No	No	No
Planned future development	Yes	No	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Digital built environment data availability	No	No	No		No	Yes. Limited	Yes, limited	Yes	No	No	Yes	Yes	Yes	Yes
Topographic data availability	No	No	No		Yes	Yes. Limited	Yes, limited	Unknown	No	No	Yes	Yes	Yes	No
Mitigation Grants	No	No	No		No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No
Communities expressed interest in improving existing or development new community plans?	Yes	Yes	Yes		No	No	Potentially	No	Yes	Yes	No	Yes	Yes	Yes
Risk MAP Conversions	No	No	No	No	No	No	No	No	No	No	No	No	No	No



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

Table 3: State Data Summary

Task Name	CID	FIPS*	Planned Future Development	Topo Coverage	Community Identified Needs	Mitigation Plans	Interest in New Community Plans	Mitigation Grants	In-House GIS	IAID	Flood and Erosion Disaster	Climatological Change
City & Borough of Juneau	020009	02110	1	1	1	1	0	1	1	0	3	0
City & Borough of Sitka	020006	02220	1	0	1	1	0	0	1	0	2	1
Fairbanks North Star Borough	025009	02090	1	1	1	1	0	1	1	0	7	0
Haines Borough	020007	02100	0	1	0	1	0	0	1	0	5	0
Kenai Peninsula Borough	020012	02122	1	1	1	1	1	1	1	0	10	1
Ketchikan Gateway Borough	020003	02130	1	1	1	1	0	0	1	0	0	0
Lake and Peninsula Borough	025063	02164	1	0	0	1	0	0	1	0	4	0
Matanuska-Susitna, Borough of	020021	02170	1	1	1	1	1	1	1	0	11	1
Municipality of Anchorage	020005	02020	1	1	1	1	1	1	1	0	5	1
Municipality of Skagway	025011	02232	0	1	1	1	1	0	1	1	2	0
Northwest Arctic Borough	020121	02188	1	0	1	1	1	1	1	0	5	1
Aniak, City of	020033	02050	0	0	1	1	1	1	1	0	7	0
Bethel, City of	020104	02050	0	0	1	1	1	1	1	0	6	1
Cordova, City of	020037	02261	1	1	1	1	1	1	1	0	6	0
Delta Junction, City of	020040	02240	0	0	1	1	1	1	1	0	1	0
Dillingham, City of	020041	02062	1	1	1	1	1	1	1	0	3	1
Emmonak, City of	020125	02270	1	1	1	1	1	0	1	1	10	0
Fort Yukon, City of	020045	02290	1	1	1	1	1	1	1	1	5	1
Galena, City of	020124	02290	1	0	0	1	1	1	1	1	5	1
Homer, City of	020107	02122	1	1	1	1	1	1	1	0	0	0
Hoonah, City of	020049	02232	1	1	1	1	1	1	1	1	1	1
Kotzebue, City of	020059	02188	1	0	1	1	1	0	1	0	5	1
Koyukuk, City of	020127	02290	0	0	0	1	1	0	1	1	3	0
Kwethluk, City of	020130	02050	1	0	1	1	1	0	1	1	4	1
McGrath, City of	020128	02290	1	1	1	1	1	1	1	1	7	1
Nenana, City of	025010	02290	0	1	1	1	0	0	1	1	1	0
Nome, City of	020069	02180	1	1	1	1	0	1	1	0	4	1
Petersburg, City of	020074	02280	1	1	1	1	1	0	1	0	0	1
Seward, City of	020113	02122	1	1	1	1	0	1	1	0	5	0
Shishmaref, City of	020084	02180	1	0	1	1	1	1	1	1	7	1
Togiak, City of	020090	02062	1	0	1	1	1	0	1	1	2	1
Valdez, City of	020094	02261	1	1	1	1	0	1	1	0	1	0
Kenai, City of	020126	02122	1	1	1	1	1	1	1	0	0	0
Soldotna, City of	020014	02122	1	1	0	1	1	1	1	0	0	0
Wrangell City & Borough	020098	02280	1	0	0	1	1	0	1	0	0	0

**Table 4: FIA Community Flood Insurance Information****Used for 2011 Alaska Risk MAP Prioritization Algorithm*

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Dillingham	02070	020700001001	0	0	0	0
10	Alaska	Bethel	02050	020500003002	23	65	8	2
10	Alaska	Yukon-Koyukuk	02290	022900004002	0	2	0	0
10	Alaska	North Slope	02185	021850002003	0	1	0	0
10	Alaska	Matanuska-Susitna	02170	021700001001	6	13	0	0
10	Alaska	Southeast Fairbanks	02240	022400001001	0	0	0	0
10	Alaska	Lake and Peninsula	02164	021640001001	0	0	0	0
10	Alaska	Yukon-Koyukuk	02290	022900002001	0	1	0	0
10	Alaska	Yukon-Koyukuk	02290	022900002002	10	24	0	0
10	Alaska	Yukon-Koyukuk	02290	022900004001	0	0	0	0
10	Alaska	Yukon-Koyukuk	02290	022900001001	0	1	0	0
10	Alaska	Lake and Peninsula	02164	021640001002	0	0	0	0
10	Alaska	North Slope	02185	021850002001	0	0	0	0
10	Alaska	Denali	02068	020680001002	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220001001	0	0	0	0
10	Alaska	Dillingham	02070	020700001002	0	0	0	0
10	Alaska	Yukon-Koyukuk	02290	020700001002	21	34	0	0
10	Alaska	Matanuska-Susitna	02170	021700001002	8	57	0	0
10	Alaska	Northwest Arctic	02188	021880001003	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700002001	0	1	0	0
10	Alaska	Aleutians East	02013	020130001002	0	0	0	0
10	Alaska	Nome	02180	021800001003	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900019001	4	2	4	1
10	Alaska	Nome	02180	021800001002	10	16	0	0
10	Alaska	Valdez-Cordova	02261	022610001001	0	1	0	0
10	Alaska	Northwest Arctic	02188	021880001005	0	0	0	0
10	Alaska	Southeast Fairbanks	02240	022400002001	0	0	0	0
10	Alaska	Yukon-Koyukuk	02290	022900001002	0	0	0	0
10	Alaska	Yakutat	02282	022820001001	0	0	0	0
10	Alaska	Nome	02180	021800001001	2	16	0	0
10	Alaska	Southeast Fairbanks	02240	022400002003	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610003001	6	18	3	1
10	Alaska	North Slope	02185	021850003001	0	0	0	0
10	Alaska	Kodiak Island	02150	021500001001	0	0	0	0
10	Alaska	Kodiak Island	02150	021500001002	0	0	0	0
10	Alaska	North Slope	02185	021850002002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900017002	4	1	2	1
10	Alaska	Aleutians West	02016	020160002002	0	0	0	0
10	Alaska	Bethel	02050	020500003001	0	0	0	0
10	Alaska	Sitka	02220	022200001001	0	0	0	0
10	Alaska	Bethel	02050	020500001006	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900019003	0	8	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010001003	0	0	0	0
10	Alaska	Anchorage	02020	020200001012	0	0	0	0
10	Alaska	Kodiak Island	02150	021500001003	0	0	0	0
10	Alaska	Aleutians East	02013	020130001001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900019004	0	0	0	0
10	Alaska	Aleutians West	02016	020160001001	1	0	0	0
10	Alaska	Wrangell-Petersburg	02280	022800001001	1	5	0	0
10	Alaska	Northwest Arctic	02188	021880001001	0	0	0	0
10	Alaska	Nome	02180	021800001004	0	0	0	0
10	Alaska	Haines	02100	021000001001	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220012001	0	0	0	0
10	Alaska	Denali	02068	020680001001	1	1	0	0
10	Alaska	Yukon-Koyukuk	02290	022900003003	0	0	0	0
10	Alaska	Skagway-Hoonah-Angoon	02232	022320003003	0	0	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010003001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900011001	0	0	1	1
10	Alaska	Skagway-Hoonah-Angoon	02232	022320003001	0	0	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Valdez-Cordova	02261	022610001003	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610002001	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610001004	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220013001	27	67	1	0
10	Alaska	Wrangell-Petersburg	02280	022800003001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900017001	50	88	12	4
10	Alaska	Matanuska-Susitna	02170	021700004001	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610001002	0	0	0	0
10	Alaska	Wade Hampton	02270	022700001002	0	0	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010001001	0	0	0	0
10	Alaska	Bethel	02050	020500001001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900018002	3	6	0	0
10	Alaska	Ketchikan Gateway	02130	021300001001	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220008001	2	2	0	0
10	Alaska	Anchorage	02020	020200029004	0	0	0	0
10	Alaska	Aleutians East	02013	020130001003	0	0	0	0
10	Alaska	Nome	02180	021800001005	0	0	0	0
10	Alaska	Wade Hampton	02270	022700001004	0	0	0	0
10	Alaska	Bristol Bay	02060	020600001001	0	0	0	0
10	Alaska	Aleutians West	02016	020160002001	0	0	0	0
10	Alaska	Anchorage	02020	020200029001	0	2	0	0
10	Alaska	Wade Hampton	02270	022700001001	2	11	0	0
10	Alaska	Northwest Arctic	02188	021880001002	0	0	0	0
10	Alaska	Nome	02180	021800002001	0	3	0	0
10	Alaska	Juneau	02110	021100005001	0	0	0	0
10	Alaska	Bethel	02050	020500001003	1	3	0	0
10	Alaska	Matanuska-Susitna	02170	021700005002	1	2	0	0
10	Alaska	Northwest Arctic	02188	021880002004	1	19	0	0
10	Alaska	Anchorage	02020	020200002042	0	1	0	0
10	Alaska	Bethel	02050	020500001005	0	0	0	0
10	Alaska	Nome	02180	021800001006	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900009001	8	145	0	0
10	Alaska	Fairbanks North Star	02090	020900009002	22	26	1	0
10	Alaska	Anchorage	02020	020200003001	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610003004	1	5	0	0
10	Alaska	Fairbanks North Star	02090	020900006002	2	13	0	0
10	Alaska	Fairbanks North Star	02090	020900012001	0	4	0	0
10	Alaska	Anchorage	02020	020200002041	0	0	0	0
10	Alaska	Northwest Arctic	02188	021880001004	3	0	3	1
10	Alaska	Skagway-Hoonah-Angoon	02232	022320003002	0	2	0	0
10	Alaska	Dillingham	02070	020700001003	0	2	0	0
10	Alaska	Matanuska-Susitna	02170	021700003001	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900019002	0	7	0	0
10	Alaska	Anchorage	02020	020200029002	4	21	0	0
10	Alaska	Juneau	02110	021100001001	0	6	0	0
10	Alaska	Kenai Peninsula	02122	021220003001	0	20	0	0
10	Alaska	Fairbanks North Star	02090	020900015004	1	24	0	0
10	Alaska	Bethel	02050	020500001004	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900015001	8	45	2	1
10	Alaska	Matanuska-Susitna	02170	021700006001	0	0	0	0
10	Alaska	Skagway-Hoonah-Angoon	02232	022320001001	0	7	0	0
10	Alaska	Fairbanks North Star	02090	020900005001	0	4	0	0
10	Alaska	Anchorage	02020	020200004001	0	0	0	0
10	Alaska	Anchorage	02020	020200001024	0	1	0	0
10	Alaska	Nome	02180	021800002002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900008002	2	7	2	1
10	Alaska	Matanuska-Susitna	02170	021700004002	5	12	0	0
10	Alaska	Kenai Peninsula	02122	021220002002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900015005	0	36	0	0
10	Alaska	Fairbanks North Star	02090	020900014005	1	23	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Kenai Peninsula	02122	021220011001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900010002	27	67	0	0
10	Alaska	Matanuska-Susitna	02170	021700013004	1	106	0	0
10	Alaska	Juneau	02110	021100006001	1	9	0	0
10	Alaska	Kenai Peninsula	02122	021220004003	0	15	0	0
10	Alaska	Fairbanks North Star	02090	020900013003	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700013005	0	9	0	0
10	Alaska	Matanuska-Susitna	02170	021700007005	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900002001	8	6	0	0
10	Alaska	Anchorage	02020	020200023011	1	8	0	0
10	Alaska	Fairbanks North Star	02090	020900015002	8	61	0	0
10	Alaska	Fairbanks North Star	02090	020900007001	2	14	0	0
10	Alaska	Matanuska-Susitna	02170	021700005001	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900019005	0	1	0	0
10	Alaska	Anchorage	02020	020200027114	0	3	0	0
10	Alaska	Bethel	02050	020500001002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900015003	0	18	0	0
10	Alaska	Kenai Peninsula	02122	021220007006	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220004001	1	12	0	0
10	Alaska	Fairbanks North Star	02090	020900016003	1	7	0	0
10	Alaska	Southeast Fairbanks	02240	022400001002	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610003002	0	1	0	0
10	Alaska	Anchorage	02020	020200028132	0	1	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010004003	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700012002	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220008002	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700007002	0	1	0	0
10	Alaska	Wrangell-Petersburg	02280	022800002004	0	7	0	0
10	Alaska	Fairbanks North Star	02090	020900002002	10	4	0	0
10	Alaska	Fairbanks North Star	02090	020900004004	1	7	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010001002	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220011002	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220004002	5	43	0	0
10	Alaska	Anchorage	02020	020200002033	0	5	0	0
10	Alaska	Fairbanks North Star	02090	020900008003	3	15	2	1
10	Alaska	Fairbanks North Star	02090	020900018001	0	0	0	0
10	Alaska	Anchorage	02020	020200007034	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900016002	0	11	0	0
10	Alaska	Fairbanks North Star	02090	020900003002	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900013002	0	1	0	0
10	Alaska	Dillingham	02070	020700002001	0	1	0	0
10	Alaska	North Slope	02185	021850001001	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700008003	1	3	0	0
10	Alaska	Anchorage	02020	020200027121	0	0	0	0
10	Alaska	Bethel	02050	020500002001	6	54	0	0
10	Alaska	Fairbanks North Star	02090	020900014001	0	24	0	0
10	Alaska	Matanuska-Susitna	02170	021700011002	0	2	0	0
10	Alaska	Fairbanks North Star	02090	020900010001	2	65	0	0
10	Alaska	Matanuska-Susitna	02170	021700013002	0	3	0	0
10	Alaska	Anchorage	02020	020200028232	0	5	0	0
10	Alaska	Kenai Peninsula	02122	021220007001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900016001	3	3	3	1
10	Alaska	Matanuska-Susitna	02170	021700007003	2	5	0	0
10	Alaska	Matanuska-Susitna	02170	021700006006	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700003002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900008004	2	47	0	0
10	Alaska	Fairbanks North Star	02090	020900014002	1	2	0	0
10	Alaska	Fairbanks North Star	02090	020900003003	1	4	0	0
10	Alaska	Fairbanks North Star	02090	020900007003	0	2	0	0
10	Alaska	Matanuska-Susitna	02170	021700006002	0	0	0	0



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Anchorage	02020	020200028231	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700011001	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900006001	0	12	0	0
10	Alaska	Fairbanks North Star	02090	020900016004	1	6	0	0
10	Alaska	Anchorage	02020	020200007013	0	0	0	0
10	Alaska	Bethel	02050	020500002004	6	48	3	1
10	Alaska	Fairbanks North Star	02090	020900008001	1	14	0	0
10	Alaska	Anchorage	02020	020200002011	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220013002	1	7	0	0
10	Alaska	Fairbanks North Star	02090	020900012003	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900004001	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700006005	0	1	0	0
10	Alaska	Matanuska-Susitna	02170	021700012003	16	64	0	0
10	Alaska	Matanuska-Susitna	02170	021700012001	0	1	0	0
10	Alaska	Juneau	02110	021100001003	4	14	3	1
10	Alaska	Anchorage	02020	020200028114	0	0	0	0
10	Alaska	Anchorage	02020	020200018024	0	2	0	0
10	Alaska	Fairbanks North Star	02090	020900001001	0	1	0	0
10	Alaska	Kodiak Island	02150	021500005001	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900005002	0	6	0	0
10	Alaska	Anchorage	02020	020200027124	1	4	0	0
10	Alaska	Kenai Peninsula	02122	021220005004	6	33	0	0
10	Alaska	Matanuska-Susitna	02170	021700010005	0	2	0	0
10	Alaska	Fairbanks North Star	02090	020900007002	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220010001	0	6	0	0
10	Alaska	Matanuska-Susitna	02170	021700007004	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900014003	1	2	0	0
10	Alaska	Kenai Peninsula	02122	021220009002	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700007001	1	1	0	0
10	Alaska	North Slope	02185	021850001002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900012002	1	1	0	0
10	Alaska	Matanuska-Susitna	02170	021700006004	0	0	0	0
10	Alaska	Anchorage	02020	020200017313	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900003004	1	2	0	0
10	Alaska	Anchorage	02020	020200007014	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900004003	0	2	0	0
10	Alaska	Anchorage	02020	020200001013	1	3	0	0
10	Alaska	Kenai Peninsula	02122	021220007002	0	15	0	0
10	Alaska	Anchorage	02020	020200001011	0	0	0	0
10	Alaska	Anchorage	02020	020200028121	0	0	0	0
10	Alaska	Anchorage	02020	020200026031	1	15	0	0
10	Alaska	Fairbanks North Star	02090	020900003001	1	1	0	0
10	Alaska	Fairbanks North Star	02090	020900013004	0	0	0	0
10	Alaska	Anchorage	02020	020200023034	0	0	0	0
10	Alaska	Juneau	02110	021100003003	2	88	0	0
10	Alaska	Matanuska-Susitna	02170	021700010003	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700010007	0	4	0	0
10	Alaska	Kenai Peninsula	02122	021220010002	0	8	0	0
10	Alaska	Matanuska-Susitna	02170	021700010006	0	9	0	0
10	Alaska	Anchorage	02020	020200027021	0	2	0	0
10	Alaska	Fairbanks North Star	02090	020900013005	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700010004	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220008003	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220009001	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220008004	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220002003	0	0	0	0
10	Alaska	Anchorage	02020	020200002012	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900013001	0	1	0	0
10	Alaska	Kenai Peninsula	02122	021220007004	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700013003	0	4	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Anchorage	02020	020200025022	0	3	0	0
10	Alaska	Matanuska-Susitna	02170	021700008002	1	14	0	0
10	Alaska	Anchorage	02020	020200026021	0	22	0	0
10	Alaska	Matanuska-Susitna	02170	021700007007	0	0	0	0
10	Alaska	Anchorage	02020	020200026033	1	9	0	0
10	Alaska	Anchorage	02020	020200027023	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900014004	0	9	0	0
10	Alaska	Matanuska-Susitna	02170	021700007006	0	0	0	0
10	Alaska	Anchorage	02020	020200027022	0	1	0	0
10	Alaska	Fairbanks North Star	02090	020900015006	1	11	0	0
10	Alaska	Southeast Fairbanks	02240	022400003001	0	0	0	0
10	Alaska	Valdez-Cordova	02261	022610003003	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900004002	1	1	0	0
10	Alaska	Matanuska-Susitna	02170	021700010002	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900001002	1	4	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010002002	0	0	0	0
10	Alaska	Anchorage	02020	020200023023	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220005002	2	28	0	0
10	Alaska	Matanuska-Susitna	02170	021700008001	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220005003	0	1	0	0
10	Alaska	Wade Hampton	02270	022700001003	0	0	0	0
10	Alaska	Anchorage	02020	020200018013	0	2	0	0
10	Alaska	Matanuska-Susitna	02170	021700006003	0	0	0	0
10	Alaska	Juneau	02110	021100004004	3	16	0	0
10	Alaska	Juneau	02110	021100003001	0	21	0	0
10	Alaska	Kenai Peninsula	02122	021220002001	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220006006	0	1	0	0
10	Alaska	Ketchikan Gateway	02130	021300002002	1	13	0	0
10	Alaska	Kenai Peninsula	02122	021220007005	0	3	0	0
10	Alaska	Valdez-Cordova	02261	022610002002	2	10	0	0
10	Alaska	Anchorage	02020	020200027123	0	0	0	0
10	Alaska	Fairbanks North Star	02090	020900006003	0	2	0	0
10	Alaska	Matanuska-Susitna	02170	021700010001	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700012004	0	5	0	0
10	Alaska	Juneau	02110	021100001002	2	7	0	0
10	Alaska	Matanuska-Susitna	02170	021700009002	0	3	0	0
10	Alaska	Anchorage	02020	020200028122	0	1	0	0
10	Alaska	Anchorage	02020	020200023013	0	0	0	0
10	Alaska	Kodiak Island	02150	021500002004	0	0	0	0
10	Alaska	Juneau	02110	021100006003	1	3	0	0
10	Alaska	Sitka	02220	022200002001	2	21	0	0
10	Alaska	Anchorage	02020	020200007011	0	0	0	0
10	Alaska	Anchorage	02020	020200029003	0	0	0	0
10	Alaska	Anchorage	02020	020200026012	0	0	0	0
10	Alaska	Anchorage	02020	020200023033	0	1	0	0
10	Alaska	Anchorage	02020	020200024002	2	4	0	0
10	Alaska	Kenai Peninsula	02122	021220006005	3	7	0	0
10	Alaska	Ketchikan Gateway	02130	021300002001	1	0	0	0
10	Alaska	Anchorage	02020	020200008025	0	0	0	0
10	Alaska	Juneau	02110	021100006002	1	2	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010002001	0	0	0	0
10	Alaska	Anchorage	02020	020200001021	0	0	0	0
10	Alaska	Anchorage	02020	020200016011	0	0	0	0
10	Alaska	Anchorage	02020	020200002032	1	1	0	0
10	Alaska	Juneau	02110	021100004001	2	19	0	0
10	Alaska	Anchorage	02020	020200007022	0	0	0	0
10	Alaska	Anchorage	02020	020200005002	0	0	0	0
10	Alaska	Anchorage	02020	020200026013	0	2	0	0
10	Alaska	Fairbanks North Star	02090	020900006004	0	0	0	0
10	Alaska	Anchorage	02020	020200027024	1	0	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Anchorage	02020	020200009012	0	0	0	0
10	Alaska	Anchorage	02020	020200017012	0	0	0	0
10	Alaska	Anchorage	02020	020200018012	0	0	0	0
10	Alaska	Juneau	02110	021100002004	0	35	0	0
10	Alaska	Kenai Peninsula	02122	021220006001	0	0	0	0
10	Alaska	Anchorage	02020	020200026023	0	0	0	0
10	Alaska	Anchorage	02020	020200007023	0	2	0	0
10	Alaska	Anchorage	02020	020200017024	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220007003	0	0	0	0
10	Alaska	Bethel	02050	020500002002	0	4	0	0
10	Alaska	Kenai Peninsula	02122	021220005001	0	0	0	0
10	Alaska	Juneau	02110	021100005002	1	7	0	0
10	Alaska	Juneau	02110	021100003002	0	37	0	0
10	Alaska	Kodiak Island	02150	021500002003	0	0	0	0
10	Alaska	Anchorage	02020	020200019004	0	0	0	0
10	Alaska	Haines	02100	021000001003	0	4	0	0
10	Alaska	Anchorage	02020	020200025021	0	0	0	0
10	Alaska	Kodiak Island	02150	021500004001	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220006004	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700013001	0	0	0	0
10	Alaska	Haines	02100	021000001002	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220011003	0	0	0	0
10	Alaska	Anchorage	02020	020200010002	2	2	0	0
10	Alaska	Anchorage	02020	020200028223	1	1	0	0
10	Alaska	Bethel	02050	020500002003	2	15	0	0
10	Alaska	Anchorage	02020	020200023035	0	0	0	0
10	Alaska	Anchorage	02020	020200025024	0	0	0	0
10	Alaska	Anchorage	02020	020200028221	0	1	0	0
10	Alaska	Anchorage	02020	020200017324	0	2	0	0
10	Alaska	Anchorage	02020	020200010004	0	1	0	0
10	Alaska	Ketchikan Gateway	02130	021300004002	0	3	0	0
10	Alaska	Juneau	02110	021100002005	0	1	0	0
10	Alaska	Matanuska-Susitna	02170	021700009001	0	1	0	0
10	Alaska	Anchorage	02020	020200002024	0	0	0	0
10	Alaska	Anchorage	02020	020200023012	0	0	0	0
10	Alaska	Anchorage	02020	020200017015	1	16	0	0
10	Alaska	Kodiak Island	02150	021500002002	0	0	0	0
10	Alaska	Anchorage	02020	020200027025	1	0	0	0
10	Alaska	Anchorage	02020	020200001022	0	2	0	0
10	Alaska	Kenai Peninsula	02122	021220002004	0	1	0	0
10	Alaska	Anchorage	02020	020200017322	0	0	0	0
10	Alaska	Anchorage	02020	020200028112	0	2	0	0
10	Alaska	Kenai Peninsula	02122	021220006002	0	0	0	0
10	Alaska	Anchorage	02020	020200008024	0	0	0	0
10	Alaska	Anchorage	02020	020200002022	0	1	0	0
10	Alaska	Anchorage	02020	020200026032	2	5	0	0
10	Alaska	Anchorage	02020	020200017014	1	12	0	0
10	Alaska	Kodiak Island	02150	021500003001	0	0	0	0
10	Alaska	Nome	02180	021800002004	0	4	0	0
10	Alaska	Sitka	02220	022200001003	1	13	0	0
10	Alaska	Anchorage	02020	020200027125	0	0	0	0
10	Alaska	Anchorage	02020	020200023022	0	0	0	0
10	Alaska	Anchorage	02020	020200017321	0	1	0	0
10	Alaska	Anchorage	02020	020200022011	0	8	0	0
10	Alaska	Anchorage	02020	020200016022	1	9	0	0
10	Alaska	Anchorage	02020	020200017011	0	2	0	0
10	Alaska	Anchorage	02020	020200002034	0	1	0	0
10	Alaska	Dillingham	02070	020700002003	0	0	0	0
10	Alaska	Anchorage	02020	020200028212	0	3	0	0
10	Alaska	Anchorage	02020	020200027111	0	2	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Anchorage	02020	020200023021	0	0	0	0
10	Alaska	Anchorage	02020	020200016012	3	2	0	0
10	Alaska	Ketchikan Gateway	02130	021300001003	0	0	0	0
10	Alaska	Anchorage	02020	020200028131	0	0	0	0
10	Alaska	Anchorage	02020	020200007031	0	0	0	0
10	Alaska	Anchorage	02020	020200016013	0	0	0	0
10	Alaska	Juneau	02110	021100001004	0	4	0	0
10	Alaska	Juneau	02110	021100002003	0	8	0	0
10	Alaska	Anchorage	02020	020200009022	0	0	0	0
10	Alaska	Anchorage	02020	020200028213	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220006003	0	0	0	0
10	Alaska	Anchorage	02020	020200022013	0	0	0	0
10	Alaska	Ketchikan Gateway	02130	021300003002	0	9	0	0
10	Alaska	Anchorage	02020	020200025023	0	4	0	0
10	Alaska	Anchorage	02020	020200026011	0	4	0	0
10	Alaska	Sitka	02220	022200001005	0	10	0	0
10	Alaska	Anchorage	02020	020200028123	0	0	0	0
10	Alaska	Anchorage	02020	020200013001	0	0	0	0
10	Alaska	Dillingham	02070	020700002002	0	5	0	0
10	Alaska	Anchorage	02020	020200018011	3	2	0	0
10	Alaska	Anchorage	02020	020200028211	0	0	0	0
10	Alaska	Anchorage	02020	020200015001	0	0	0	0
10	Alaska	Anchorage	02020	020200017323	0	1	0	0
10	Alaska	Anchorage	02020	020200008023	0	0	0	0
10	Alaska	Anchorage	02020	020200013003	0	7	0	0
10	Alaska	Juneau	02110	021100005004	2	5	0	0
10	Alaska	Anchorage	02020	020200002023	0	2	0	0
10	Alaska	Anchorage	02020	020200001023	0	1	0	0
10	Alaska	Anchorage	02020	020200017023	1	1	0	0
10	Alaska	Anchorage	02020	020200002035	0	2	0	0
10	Alaska	Anchorage	02020	020200017312	0	0	0	0
10	Alaska	Ketchikan Gateway	02130	021300003003	0	11	0	0
10	Alaska	Anchorage	02020	020200009011	0	0	0	0
10	Alaska	Anchorage	02020	020200028222	0	1	0	0
10	Alaska	Anchorage	02020	020200008014	0	0	0	0
10	Alaska	Sitka	02220	022200002003	0	5	0	0
10	Alaska	Southeast Fairbanks	02240	022400002002	0	3	0	0
10	Alaska	Anchorage	02020	020200007012	0	0	0	0
10	Alaska	Anchorage	02020	020200021002	0	0	0	0
10	Alaska	Anchorage	02020	020200007035	0	2	0	0
10	Alaska	Anchorage	02020	020200002031	0	0	0	0
10	Alaska	Anchorage	02020	020200022012	0	0	0	0
10	Alaska	Anchorage	02020	020200002021	0	0	0	0
10	Alaska	Yukon-Koyukuk	02290	022900003002	0	0	0	0
10	Alaska	Anchorage	02020	020200012003	1	14	0	0
10	Alaska	Anchorage	02020	020200022023	1	2	0	0
10	Alaska	Anchorage	02020	020200025015	0	0	0	0
10	Alaska	Anchorage	02020	020200005001	0	3	0	0
10	Alaska	Anchorage	02020	020200018023	0	1	0	0
10	Alaska	Anchorage	02020	020200014003	0	0	0	0
10	Alaska	Juneau	02110	021100002001	0	1	0	0
10	Alaska	Anchorage	02020	020200010001	0	0	0	0
10	Alaska	Wrangell-Petersburg	02280	022800002001	0	11	0	0
10	Alaska	Anchorage	02020	020200023036	0	0	0	0
10	Alaska	Juneau	02110	021100002002	0	12	0	0
10	Alaska	Anchorage	02020	020200009021	0	0	0	0
10	Alaska	Anchorage	02020	020200016021	0	5	0	0
10	Alaska	Anchorage	02020	020200025014	0	0	0	0
10	Alaska	Anchorage	02020	020200018022	1	0	0	0
10	Alaska	Anchorage	02020	020200012004	0	0	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Anchorage	02020	020200014004	0	0	0	0
10	Alaska	Sitka	02220	022200001004	0	9	0	0
10	Alaska	Anchorage	02020	020200020003	0	0	0	0
10	Alaska	Anchorage	02020	020200019005	0	1	0	0
10	Alaska	Anchorage	02020	020200016024	1	0	0	0
10	Alaska	Anchorage	02020	020200024003	0	0	0	0
10	Alaska	Anchorage	02020	020200015002	0	2	0	0
10	Alaska	Juneau	02110	021100004002	0	2	0	0
10	Alaska	Anchorage	02020	020200028111	0	0	0	0
10	Alaska	Kenai Peninsula	02122	021220011004	0	0	0	0
10	Alaska	Juneau	02110	021100005003	0	3	0	0
10	Alaska	Juneau	02110	021100003004	0	18	0	0
10	Alaska	Anchorage	02020	020200019002	0	0	0	0
10	Alaska	Wrangell-Petersburg	02280	022800002003	0	8	0	0
10	Alaska	Anchorage	02020	020200017013	0	0	0	0
10	Alaska	Anchorage	02020	020200025011	1	1	0	0
10	Alaska	Kodiak Island	02150	021500003002	0	0	0	0
10	Alaska	Anchorage	02020	020200028113	0	0	0	0
10	Alaska	Anchorage	02020	020200017314	0	0	0	0
10	Alaska	Anchorage	02020	020200012002	0	1	0	0
10	Alaska	Sitka	02220	022200002002	0	4	0	0
10	Alaska	Anchorage	02020	020200007033	0	0	0	0
10	Alaska	Anchorage	02020	020200017022	2	0	0	0
10	Alaska	Anchorage	02020	020200012001	1	0	0	0
10	Alaska	Anchorage	02020	020200008016	0	1	0	0
10	Alaska	Anchorage	02020	020200014006	0	0	0	0
10	Alaska	Anchorage	02020	020200023032	0	1	0	0
10	Alaska	Anchorage	02020	020200014002	0	2	0	0
10	Alaska	Anchorage	02020	020200017021	0	0	0	0
10	Alaska	Anchorage	02020	020200009013	0	0	0	0
10	Alaska	Nome	02180	021800002003	3	4	0	0
10	Alaska	Anchorage	02020	020200006004	0	0	0	0
10	Alaska	Anchorage	02020	020200021005	0	0	0	0
10	Alaska	Ketchikan Gateway	02130	021300001002	0	1	0	0
10	Alaska	Anchorage	02020	020200012005	0	3	0	0
10	Alaska	Northwest Arctic	02188	021880002001	0	0	0	0
10	Alaska	Anchorage	02020	020200015003	0	0	0	0
10	Alaska	Anchorage	02020	020200023014	0	1	0	0
10	Alaska	Anchorage	02020	020200006002	0	0	0	0
10	Alaska	Anchorage	02020	020200009023	0	2	0	0
10	Alaska	Anchorage	02020	020200016023	0	1	0	0
10	Alaska	Anchorage	02020	020200027112	0	0	0	0
10	Alaska	Anchorage	02020	020200028133	0	0	0	0
10	Alaska	Anchorage	02020	020200019001	2	1	0	0
10	Alaska	Ketchikan Gateway	02130	021300004001	0	0	0	0
10	Alaska	Anchorage	02020	020200022021	0	0	0	0
10	Alaska	Ketchikan Gateway	02130	021300003001	0	6	0	0
10	Alaska	Anchorage	02020	020200011002	1	1	0	0
10	Alaska	Anchorage	02020	020200018021	0	0	0	0
10	Alaska	Anchorage	02020	020200007021	0	0	0	0
10	Alaska	Anchorage	02020	020200015004	0	1	0	0
10	Alaska	Anchorage	02020	020200010003	0	0	0	0
10	Alaska	Anchorage	02020	020200027113	0	0	0	0
10	Alaska	Sitka	02220	022200002006	0	2	0	0
10	Alaska	Anchorage	02020	020200008011	0	0	0	0
10	Alaska	Anchorage	02020	020200025012	1	1	0	0
10	Alaska	Sitka	02220	022200001002	0	1	0	0
10	Alaska	Anchorage	02020	020200023031	0	0	0	0
10	Alaska	Anchorage	02020	020200006007	0	0	0	0
10	Alaska	Anchorage	02020	020200006005	0	0	0	0



(continued) Table 4: FIA Community Flood Insurance Information

REGION	STATE	Borough	STCOFIPS	FIPS	SINGLE CLAIMS	POLICIES	REPETITIVE LOSSES	REPETITIVE LOSS PROPERTIES
10	Alaska	Wrangell-Petersburg	02280	022800003002	0	0	0	0
10	Alaska	Anchorage	02020	020200017315	1	2	0	0
10	Alaska	Valdez-Cordova	02261	022610003005	0	0	0	0
10	Alaska	Wrangell-Petersburg	02280	022800002002	0	4	0	0
10	Alaska	Kodiak Island	02150	021500002001	0	0	0	0
10	Alaska	Anchorage	02020	020200006003	0	0	0	0
10	Alaska	Anchorage	02020	020200025013	0	0	0	0
10	Alaska	Anchorage	02020	020200008017	0	0	0	0
10	Alaska	Anchorage	02020	020200015005	0	0	0	0
10	Alaska	Anchorage	02020	020200008015	0	0	0	0
10	Alaska	Anchorage	02020	020200021003	0	4	0	0
10	Alaska	Anchorage	02020	020200013002	0	0	0	0
10	Alaska	Anchorage	02020	020200020001	0	0	0	0
10	Alaska	Anchorage	02020	020200022014	0	1	0	0
10	Alaska	Anchorage	02020	020200020004	0	0	0	0
10	Alaska	Anchorage	02020	020200021001	0	1	0	0
10	Alaska	Anchorage	02020	020200007032	0	0	0	0
10	Alaska	Anchorage	02020	020200006008	0	0	0	0
10	Alaska	Anchorage	02020	020200014001	0	0	0	0
10	Alaska	Ketchikan Gateway	02130	021300001004	0	0	0	0
10	Alaska	Anchorage	02020	020200017311	0	0	0	0
10	Alaska	Anchorage	02020	020200024001	0	5	0	0
10	Alaska	Valdez-Cordova	02261	022610003006	0	1	0	0
10	Alaska	Anchorage	02020	020200026022	0	0	0	0
10	Alaska	Sitka	02220	022200002004	0	4	0	0
10	Alaska	Anchorage	02020	020200008021	0	0	0	0
10	Alaska	Anchorage	02020	020200021004	1	0	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010004002	0	0	0	0
10	Alaska	Sitka	02220	022200002005	0	9	0	0
10	Alaska	Anchorage	02020	020200019003	0	0	0	0
10	Alaska	Anchorage	02020	020200023025	0	0	0	0
10	Alaska	Anchorage	02020	020200006006	0	0	0	0
10	Alaska	Anchorage	02020	020200008022	0	0	0	0
10	Alaska	Northwest Arctic	02188	021880002003	0	1	0	0
10	Alaska	Anchorage	02020	020200008012	0	0	0	0
10	Alaska	Anchorage	02020	020200020002	0	0	0	0
10	Alaska	Anchorage	02020	020200022024	0	0	0	0
10	Alaska	Anchorage	02020	020200008013	0	0	0	0
10	Alaska	Juneau	02110	021100004003	0	4	0	0
10	Alaska	Anchorage	02020	020200017025	0	0	0	0
10	Alaska	Anchorage	02020	020200022022	0	0	0	0
10	Alaska	Anchorage	02020	020200014005	0	0	0	0
10	Alaska	Wrangell-Petersburg	02280	022800003003	0	0	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010002003	0	0	0	0
10	Alaska	Matanuska-Susitna	02170	021700002002	0	0	0	0
10	Alaska	Anchorage	02020	020200006001	0	4	0	0
10	Alaska	Wrangell-Petersburg	02280	022800003004	0	0	0	0
10	Alaska	Northwest Arctic	02188	021880002002	0	0	0	0
10	Alaska	Anchorage	02020	020200023024	0	0	0	0
10	Alaska	Anchorage	02020	020200011001	0	0	0	0
10	Alaska	Skagway-Hoonah-Angoon	02232	022320002001	0	0	0	0
10	Alaska	Prince of Wales-Outer Ketchikan	02201	022010004001	0	0	0	0
10	Alaska	Bristol Bay	02060	020600001002	0	0	0	0
10	Alaska	Anchorage	02020	020200027122	0	0	0	0
10	Alaska	Anchorage	02020	020200008011	0	0	0	0
10	Alaska	Anchorage	02020	020200025012	1	1	0	0
10	Alaska	Sitka	02220	022200001002	0	1	0	0
10	Alaska	Anchorage	02020	020200023031	0	0	0	0
10	Alaska	Anchorage	02020	020200006007	0	0	0	0
10	Alaska	Anchorage	02020	020200006005	0	0	0	0



Table 5: Local Hazard Mitigation Plans
**Used for 2011 Alaska Risk MAP Prioritization Algorithm*

Plan Title	Plan Type	Participating Jurisdiction	Borough or Census Area	Jurisdiction Type	Approvable Pending Adoption Date	Approval Date	As of	Expiration Date	Second Approvable Pending Adoption Date	Second Approval Date	Second Expiration Date	Use of DFIRM	Borough FIPS	Borough Pop	CID	Comm Pop	MIIP Borough Name	CIS Comm Name	e	1e	Mitigation Plan
Alaska State Hazard Mitigation Plan	SS	Alaska		State		10/26/07	05/31/11	10/26/10		10/26/10	10/26/13				2						
Alakanuk, City of	S	Alakanuk	Wade-Hampton	City		10/19/07	05/31/11	10/17/12					02270	7,028	020030	652	WADE-HAMPTON	ALAKANUK, CITY OF			1
Alatna Hazard Mitigation Plan	S	Alatna, Village of	Unorganized Borough	Village	12/30/09	01/21/10	05/31/11	01/21/15													1
City of Allakaket Multi-Hazard Mitigation Plan	S	City of Allakaket	Unorganized Borough	City	03/17/10	04/12/10	05/31/11	04/12/15				No	02290	6,510	020003	97	YUKON-KOYUKUK				1
Anchorage	S	Anchorage	Anchorage	City		04/25/05	05/31/11	04/24/10	05/09/11		05/09/16		02020	260,283	020005	260283	ANCHORAGE	ANCHORAGE, MUNICIPALITY OF	1e		1
City of Anvik Multi-Hazard Mitigation Plan	S	Anvik	Unorganized Borough	City	03/17/10	04/12/10	05/31/11	04/12/15				No	02290	6,510	020103	104	YUKON-KOYUKUK	ANVIK, CITY OF			1
Bethel, City of	S	Bethel	Bethel	City		06/16/08	05/31/11	06/15/13					02050	16,046	020104	5471	BETHEL	BETHEL, CITY OF			1
City of Bettles Multi-Hazard Mitigation Plan	S	Bettles	Unorganized Borough	City	03/17/10	06/23/10	05/31/11	06/23/15				No	02290	6,510	020005	43	YUKON-KOYUKUK				1
Cordova, City of	S	Cordova	Valdez-Cordova	City		09/05/08	05/31/11	09/04/13					02261	10,195	020037	2454	VALDEZ-CORDOVA	CORDOVA, CITY OF			1
Dillingham, City of	S	Dillingham	Dillingham	City		03/21/08	05/31/11	03/20/13					02999		020041	2466	UNORGANIZED BOROUGH	DILLINGHAM, CITY OF			1
Emmonak, City of	S	Emmonak	Wade-Hampton	City		07/31/08	05/31/11	07/30/13					02270	7,028	020125	767	WADE-HAMPTON	EMMONAK, CITY OF			1
Golovin, City of	S	Golovin	Nome	City		12/08/08	05/31/11	12/07/13				No	02180	9,196	020047	144	NOME	GOLOVIN, CITY OF			1
Hooper Bay, city of	S	Hooper Bay	Wade-Hampton	City		04/17/07	05/31/11	04/15/12					02270	7,028	020108	1014	WADE-HAMPTON	HOOPER BAY, CITY OF			1
Juneau Borough	S	Juneau City and Borough	Juneau	Borough		12/15/04	05/31/11	12/14/09		07/30/10	07/30/15		02110	30,711	020009	30711	JUNEAU BOROUGH	JUNEAU, CITY AND BOROUGH OF	1e		1
Ketchikan Borough Hazard Mitigation Plan	M	Ketchikan	Ketchikan Borough	Borough	03/17/10	08/17/10	05/31/11	08/17/15				No	02130	14,059	020002	5717	KETCHIKAN GATEWAY	KETCHIKAN GATEWAY BOROUGH			1
Ketchikan Borough Hazard Mitigation Plan	M	Ketchikan	Ketchikan Borough	City	03/17/10	08/17/10	05/31/11	08/17/15				No	02130	14,059	020003	7922	KETCHIKAN GATEWAY BOROUGH	KETCHIKAN GATEWAY BOROUGH			1
Ketchikan Borough Hazard Mitigation Plan	M	Saxman	Ketchikan Borough	City	03/17/10	08/17/10	05/31/11	08/17/15				No	02130	14,059	020004	431	KETCHIKAN GATEWAY	KETCHIKAN GATEWAY			1
Kivalina (City of), Alaska Local Hazards Mitigation Plan	S	Kivalina	Northwest Arctic Borough	City		12/14/07	05/31/11	12/12/12					02188	7,208	020056	377	NORTHWEST ARTIC BOROUGH	KIVALINA, CITY OF			1
Kotlik, City of, Hazard Mitigation Plan	S	Kotlik	Wade-Hampton	City		12/31/07	05/31/11	12/29/12					02270	7,028	020058	591	WADE-HAMPTON	KOTLIK, CITY OF			1
Kotzebue, City of	S	Kotzebue	Northwest Arctic Borough	City		06/18/08	05/31/11	06/17/13					02188	7,208	020059	3082	NORTHWEST ARTIC BOROUGH	KOTZEBUE, CITY OF			1
Koyukuk, City of	S	Koyukuk	Yukon-Koyukuk	City		10/03/08	05/31/11	10/02/13				No	02999	6,510	020127	101	YUKON-KOYUKUK	KOYUKUK, CITY OF			1
Kwethluk Multi-Hazard Mitigation Plan	S	Kwethluk, City of	Bethel	City	12/30/09	02/23/10	05/31/11	02/23/15					02050	16,046	020130	713	BETHEL	KWETHLUK, CITY OF			1
Lake and Peninsula Borough	M	Lake and Peninsula	Lake and Peninsula Borough	Borough		02/04/09	05/31/11	02/04/14				No	02164	1,823	025063	1377	LAKE & PENINSULA BOROUGH	LAKE AND PENINSULA BOROUGH			1
Lake and Peninsula Borough	M	Chignik Bay	Lake and Peninsula Borough	City		02/04/09	05/31/11	02/04/14				No	02164	1,823	AKO007		LAKE & PENINSULA				1



(continued) Table 5: Local Hazard Mitigation Plans

Plan Title	Plan Type	Participating Jurisdiction	Borough or Census Area	Jurisdiction Type	Approvable Pending Adoption Date	Approval Date	As of	Expiration Date	Second Approvable Pending Adoption Date	Second Approval Date	Expiration Date	Use of DFIRM	Borough FIPS	Borough Pop	CID	Comm Pop	MIP Borough Name	CIS Comm Name	Le	Mitigation Plan
Lake and Peninsula Borough	M	Egegik	Lake and Peninsula Borough	City		02/04/09	05/31/11	02/04/14				No	02164	1,823	AK0008		LAKE & PENINSULA			1
Lake and Peninsula Borough	M	Newhalen	Lake and Peninsula Borough	City	12/30/08		05/31/11	02/04/14				No	02164	1,823	020067	106	LAKE & PENINSULA	NEWHALEN, CITY/DILLIN GHAM		1
Lake and Peninsula Borough	M	Nondalton	Lake and Peninsula Borough	City		02/04/09	05/31/11	02/04/14				No	02164	1,823	020070	221	LAKE & PENINSULA	NONDALTON, CITY/DILLIN GHAM		1
Lake and Peninsula Borough	M	Pilot Point	Lake and Peninsula Borough	City		02/04/09	05/31/11	02/04/14				No	02164	1,823	AK0009		LAKE & PENINSULA			1
Lake and Peninsula Borough	M	Port Heiden	Lake and Peninsula Borough	City	12/30/08	02/04/09	05/31/11	02/04/14				No	02164	1,823	020112	119	LAKE & PENINSULA	PORT HEIDEN, CITY OF		1
Matanuska-Susitna Borough	S	Mat-Su Borough	Matanuska-Susitna Borough	Borough		09/29/08	05/31/11	09/28/13					02170	59,322	020021	54789	MATANUSKA-SUSITNA BOROUGH	MATANUSKA-SUSITNA, BOROUGH OF		1
McGrath, City of	S	McGrath	Yukon-Koyukuk	City		02/26/09	05/31/11	02/26/14				No	02290	6,510	020128	401	YUKON-KOYUKUK	MCGRATH, CITY OF		1
Newtok, Village of	S	Newtok	Bethel	Village		08/11/08	05/31/11	08/10/13					02999		AK0010	321	UNORGANIZED BOROUGH			1
Nome, City of	S	Nome	Nome	City		06/18/08	05/31/11	06/17/13					02999	9,196	020069	3505	NOME	NOME, CITY OF		1
Nunam Iqua, City of	S	Nunam Iqua	Bethel	City	12/17/08	05/31/11	05/31/11	12/17/13				No	02999		AK0014		WRANGELL-PETERSBURG			1
Petersburg	S	Petersburg	Wrangell-Petersburg	City		06/02/08	05/31/11	06/01/13					02280		020074	3224	PETERSBURG	PETERSBURG, CITY OF		1
Red Devil, Village of	S	Red Devil	Bethel	Village		09/12/08	05/31/11	09/11/13					02999		AK0015	48				1
Saint Mary's Multi-Hazard Mitigation Plan	S	Saint Mary's, City of	Wade-Hampton	City	12/30/09	02/16/10	05/31/11	02/16/15					02270	7,028	020077	500	WADE-HAMPTON	SAINT MARY, CITY OF		1
Saint Paul, City of	S	Saint Paul	Aleutians West	City		12/31/08	05/31/11	12/31/13				No	02016	5,465	AK0016	0	ALEUTIANS WEST			1
Shishmaref Hazard Mitigation Plan	S	Shishmaref, City of	Nome	City	12/30/09	02/16/10	05/31/11	02/16/15					02180	9,196	020084	562	NOME	SHISHMAREF, CITY OF		1
Sleetmute, Village of	S	Sleetmute	Bethel	Village		09/10/08	05/31/11	09/09/13					02999		AK0017	100				1
Unalakleet, City of	S	Unalakleet	Nome	City		09/25/08	05/31/11	09/24/13					02999	9,196	020027	747	NOME			1
Valdez, City of	S	Valdez	Valdez-Cordova	City		06/27/08	05/31/11	06/26/13					02261	10,195	020094	4036	VALDEZ-CORDOVA	VALDEZ, CITY OF		1
Whittier, City of	S	Whittier	Valdez-Cordova	City		07/16/08	05/31/11	07/15/13					02261	10,195	020097	182	VALDEZ-CORDOVA	WHITTIER, CITY OF		1
Yakutat, City & Borough of	S	Yakutat	Yakutat Borough	City & Borough		09/05/08	05/31/11	09/04/13					02282	808	020099	680	YAKUTAT BOROUGH	YAKUTAT, CITY OF		1
Northwest Arctic Borough MHMP	M	Northwest Arctic Borough	Northwest Arctic Borough	Borough		06/08/09	05/31/11	06/08/14				No	02188	7,208	020121	1225	NORTHWEST ARCTIC BOROUGH	NORTHWEST ARCTIC BOROUGH		1
Northwest Arctic Borough MHMP	M	Ambler	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020031	309	NORTHWEST ARCTIC BOROUGH	AMBLER, CITY/KOBUK DIVISION		1
Northwest Arctic Borough MHMP	M	Buckland	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020105	406	NORTHWEST ARCTIC BOROUGH	BUCKLAND, CITY/KOBUK DIVISION		1



(continued) Table 5: Local Hazard Mitigation Plans

Plan Title	Plan Type	Participating Jurisdiction	Borough or Census Area	Jurisdiction Type	Approvable Pending Adoption Date	Approval Date	As of	Expiration Date	Second Approvable Pending Adoption Date	Second Approval Date	Expiration Date	Use of DIRM	Borough FIPS	Borough Pop	CID	Comm Pop	MIP Borough Name	CIS Comm Name	e	1e	Mitigation Plan
Northwest Arctic Borough MHMP	M	Deering	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020039	136	NORTHWEST ARCTIC	DEERING, CITY/KOBUK DIVISION		1	
Northwest Arctic Borough MHMP	M	Kiana	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020054	388	NORTHWEST ARCTIC	KIANA, CITY/KOBUK DIVISION		1	
Northwest Arctic Borough MHMP	M	Kobuk	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	AKO019		NORTHWEST ARCTIC			1	
Northwest Arctic Borough MHMP	M	Noatak	Northwest Arctic Borough	City	04/02/09		05/31/11	06/08/14				No	02188	7,208	AKO020		NORTHWEST ARCTIC			1	
Northwest Arctic Borough MHMP	M	Noorvik	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020071	634	NORTHWEST ARCTIC	NOORVIK, CITY/KOBUK DIVISION		1	
Northwest Arctic Borough MHMP	M	Selawik	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020081	772	NORTHWEST ARCTIC	SELAWIK, CITY/KOBUK DIVISION		1	
Northwest Arctic Borough MHMP	M	Shungnak	Northwest Arctic Borough	City		06/08/09	05/31/11	06/08/14				No	02188	7,208	020085	256	NORTHWEST ARCTIC	SHUNGNAK, CITY/KOBUK DIVISION		1	
Community of Tok MHMP	S	Tok	Unorganized Borough	Community		08/19/09	05/31/11	08/19/14				No	02240		AKO021		SOUTHEAST FAIRBANKS			1	
Craig, City of	S	Craig	Unorganized Borough	City	11/04/09	03/18/10	05/31/11	03/18/15				No	02201	6,157	020038	1397	PRINCE OF WALES-OUTER KETCHIKAN	CRAIG, CITY OF		1	
Hoonah, City of	S	Hoonah	Hoonah-Angoon	City	11/04/09	01/21/10	05/31/11	01/21/15					02232	3,436	020049	860	SKAGWAY-HOONAH-ANGOON	HOONAH, CITY OF		1	
Skagway, Municipality of	S	Skagway	Skagway	City	11/04/09	12/30/09	05/31/11	12/30/14					02232	3,436	025011	862	SKAGWAY-HOONAH-ANGOON	SKAGWAY, CITY OF		1	
Wrangell, City and Borough of	S	Wrangell	Wrangell-Petersburg	City & Borough	11/04/09	01/21/10	05/31/11	01/21/15					02280	6,684	020098	2308	WRANGELL-PETERSBURG	WRANGELL, CITY OF		1	
Huslia HMP	S	Huslia	Unorganized Borough	City	12/11/09	02/23/10	05/31/11	02/13/15					02290	6,510	020050	293	YUKON-KOYUKUK	HUSLIA, CITY OF		1	
Haines Borough Multi-Hazard Mitigation Plan	S	Haines	Haines Borough	Borough	01/13/10		05/31/11	01/13/10		04/08/10	04/08/15		02100	2,392	020007	581	HAINES	HAINES BOROUGH	1e	1	
Community of Shaktoolik Multi-Hazard Mitigation Plan	S	Shaktoolik	Unorganized Borough	City	01/13/10	02/16/10	05/31/11	02/16/15					02180	9,196	020083	230	NOME	SHAKTOOLIK, CITY OF		1	
City of Togiak Multi-Hazard Mitigation Plan	S	Togiak, City of	Unorganized Borough	City	01/13/10	02/16/10	05/31/11	02/16/15					02070	4,922	020090	809	DILLINGHAM	TOGIAK, CITY OF		1	
Denali Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Denali	Denali Borough	Borough	02/23/10	05/27/10	05/31/11	05/27/15					02068	1,893	02X040	1526	DENALI			1	
Denali Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Anderson, City of	Denali Borough	Borough	02/23/10	05/27/10	05/31/11	05/27/15					02068	1,893	AKO024	0	DENALI			1	
Nulato HMP	S	Nulato	Unorganized Borough	City	12/11/09	01/13/10	05/31/11	01/13/15					02290	6,510	020072	336	YUKON-KOYUKUK	NULATO, CITY OF		1	
The Native Village of Evansville HMP	S	Evansville, Native Village of	Unorganized Borough	Native Village	04/12/10	05/26/10	05/31/11	05/26/15					02290		F14XXX	0	YUKON-KOYUKUK	Evansville Village (aka Bettles Field)		1	
City of Galena HMP	S	Galena, City of	Unorganized Borough	City	04/12/10	06/06/10	05/31/11	06/06/15					02290	6,510	020124	675	YUKON-KOYUKUK	GALENA, CITY OF		1	



(continued) Table 5: Local Hazard Mitigation Plans

Plan Title	Plan Type	Participating Jurisdiction	Borough or Census Area	Jurisdiction Type	Approvable Pending Adoption Date	Approval Date	As of	Expiration Date	Second Approvable Pending Adoption Date	Second Approval Date	Expiration Date	Use of DIRM	Borough FIPS	Borough Pop	CID	Comm Pop	MIP Borough Name	CIS Comm Name	Lead	Mitigation Plan
City of Kaltag HMP	S	Kaltag, City of	Unorganized Borough	City	04/12/10	08/17/10	05/31/11	08/17/15			08/17/15		02290	6,510	020053	230	YUKON-KOYUKUK	KALTAG, CITY OF		1
City of Ruby HMP	S	Ruby, City of	Unorganized Borough	City	04/12/10	06/23/10	05/31/11	06/23/15			06/23/15		02290	6,510	020023	188	YUKON-KOYUKUK			1
City of Sitka HMP	S	Sitka, City of	Sitka	City		04/20/10	05/31/11	04/20/15			04/20/15		02220		020006	8835	SITKA	SITKA, CITY AND BOROUGH OF		1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Sand Point, City of	Aleutians East	City		06/25/10	05/31/11	06/25/15			06/25/15		02013	2,697	020079	878	ALEUTIANS EAST	SAND POINT, CITY OF		1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Aktutan, City of	Aleutians East	City		06/25/10	05/31/11	06/25/15			06/25/15		02016	5,465	020001	713	ALEUTIANS WEST			1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Cold Bay, City of	Aleutians East	City		06/25/10	05/31/11	06/25/15			06/25/15		02013	2,697	AKO025	0	ALEUTIANS EAST			1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	King Cove, City of	Aleutians East	City		06/25/10	05/31/11	06/25/15			06/25/15		02013	2,697	020055	792	ALEUTIANS EAST	KING COVE, CITY		1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	False Pass, City of	Aleutians East	City		06/25/10	05/31/11	06/25/15			06/25/15		02013	2,697	AKO026	0	ALEUTIANS EAST			1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Nelson Lagoon Tribal Council	Aleutians East	Tribal Council		06/25/10	05/31/11	06/25/15			06/25/15		02013	2,697	AKO027	0	ALEUTIANS EAST			1
Communities of the Aleutians East Borough Multi-Jurisdiction Multi-Hazard Mitigation Plan	M	Aleutians East Borough	Aleutians East	Borough		06/25/10	05/31/11	06/25/15			06/25/15		02013	2,697	020041	1027	ALEUTIANS EAST			1
City of Nenana HMP	S	Nenana, City of	Unorganized Borough	City	07/26/10	09/23/10	05/31/11	09/23/15			09/23/15		02290	6,510	025010	402	YUKON-KOYUKUK	NENANA, CITY OF		1
City of Fort Yukon HMP	S	Fort Yukon, City of	Unorganized Borough	City	07/26/10	08/17/10	05/31/11	08/17/15			08/17/15		02290	6,510	020045	595	YUKON-KOYUKUK	FORT YUKON, CITY OF		1
City of Pilot Station HMP	S	Pilot Station, City of	Unorganized Borough	City	07/26/10	09/23/10	05/31/11	09/23/15			09/23/15		02270	7,028	020075	550	WADE-HAMPTON	PILOT STATION, CITY OF		1
City of Hughes HMP	S	Hughes, City of	Unorganized Borough	City	07/26/10	09/22/10	05/31/11	09/22/15			09/22/15		02290	6,510	020013	78	YUKON-KOYUKUK			1
City of Angoon HMP	S	Angoon, City of	Unorganized Borough	City	12/13/11		12/20/11						02232	459	020102		Skagway-Hoonah-Angoon			
City of Gambell HMP	S	Gambell, City of	Unorganized Borough	City	12/13/11		12/20/11						02180	681	020046		NOME			
City of New Stuyahok	S	New Stuyahok, City of	Unorganized Borough	City	12/13/11		12/20/11						02070	510	020111		DILLINGHAM			
City of Quinhagak	S	Quinhagak, City of	Unorganized Borough	City	12/13/11		12/20/11						02050	669			BETHEL			
City of Savoonga	S	Savoonga, City of	Unorganized Borough	City	12/13/2011		12/20/11						02180	671	020080		NOME			



(continued) Table 5: Local Hazard Mitigation Plans

Plan Title	Plan Type	Participating Jurisdiction	Borough or Unorganized Borough	Jurisdiction Type	Approvable Pending Adoption Date	Approval Date	As of	Expiration Date	Second Approvable Pending Adoption Date	Second Approval Date	Second Expiration Date	Use of DFRM	Borough FIPS	Borough Pop	CID	Comm Pop	MIP Borough Name	CIS Comm Name	e	le	Mitigation plan
City of Thorne Bay	S	Thorne Bay, City of	Unorganized Borough	C	12/13/2011		12/20/11						02201	471			PRINCE OF WALES-OUTER KETCHIKAN				

Approved (S) and (M) Jurisdictions	78	Approved Standard State (SS) Plan	1
Approvable Pending Adoption (S) and (M) Jurisdictions	3	Approved Enhanced State (ES) Plan	0
Approved Tribal Local (TL) Plans	0	Approved Tribal State (TS) Plans	0
Approvable Pending Adoption Tribal Local (TL) Plans	0	Approvable Pending Adoption Tribal State (TS) Plans	0

State Population (Census 2010)	701,231
Community Population Total (Covered by Plan)	422,349
Total % Covered	60.23%



Table 6: Hazard Mitigation Grants
**Used for 2011 Alaska Risk MAP Prioritization Algorithm*

Region	State	Disaster #	Declaration Date	Incident Type	Disaster Title	Project #	Project Type	Project Title	Project Description	Project Boroughs	Status	Subgrantee	Subgrantee FPS Code	Project Amount	Cost Share Percentage	FPS	CD
10	AK	1637	08/04/2006	Flood	SNOW MELT AND ICE JAM FLOODING	0001	90.1.1 Local Multi-hazard Mitigation Plan	City of Saint Paul Island Local Multi-hazard Mitigation Plan	The City of Saint Paul will hire a contractor to develop a Local Hazard Mitigation Plan that includes the following: Review the current hazard mitigation plan; Conduct a risk assessment; and public to generate the required data and meet the objectives submitted in the application - BNCHOL2-08/02/2007 20:03 GMT	ALUTIAK WEST	Approved	Saint Paul Island	66460	\$15,000.00	75%	02016	
10	AK	1445	11/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0005	104.1.1 Densifying, Implementing and Enforcing Codes, Standards, Ordinances and Regulations; 300.1.1 Shoreline Stabilization (Riprap, etc.); 500.3.1 Flood Control - Dam	Lower Fire Lake Dam Mitigation	Replace concrete headwall and 2 ft culverts with 42 ft culverts and increase height of dam this will increase flood protection and reduce possibility of dam failure-TSCANLAN-08/18/2004 16:02 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$840,000.00	75%	02020	
10	AK	1445	11/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0004	300.1.1 Shoreline Stabilization (Riprap, etc.)	AK R8 MP 88.2 Indian Sliding Switch protection		ANCHORAGE	Approved	ALASKA RAILROAD CORPORATION	0	\$33,075.00	75%	02020	
10	AK	1445	11/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0005	400.1.1 Utility Protective Measures (Electric, Gas, etc.)	AK R8 Bridge P1 MP 86.4	Project railroad embankment with riprap for approx. 150 ft at bridge P1-TSCANLAN-03/10/2005 14:48 GMT	ANCHORAGE	Approved	ALASKA RAILROAD CORPORATION	0	\$61,339.00	75%	02020	
10	AK	1445	11/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0006	300.1.1 Shoreline Stabilization (Riprap, etc.)	AK Railroad MP 100.3 Potter area embankment protection	Enhancement protection railroad Tunogun Arm Potter area-TSCANLAN-03/10/2005 15:11 GMT	ANCHORAGE	Approved	ALASKA RAILROAD CORPORATION	0	\$62,682.00	75%	02020	
10	AK	1461	04/26/2003	Severe Storm(s)	SEVERE WINTER STORMS, INCLUDING HIGH WINDS AND FREEZING TEMPERATURES	0003	205.5. Retrofitting Public Structures - Wind	Anchorages Public Schools - Insulated Exterior Heating System (One Minor)	Damage to roof occurred during a high wind storm. Project proposes to install a system to fasten roof surfaces material on the roof of the school-ALUNES-10/27/2004 17:15 GMT	ANCHORAGE	Approved	Anchorages Municipality School District	9095	\$15,600.00	75%	02020	
10	AK	1637	08/04/2006	Flood	SNOW MELT AND ICE JAM FLOODING	0002	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	Ben Bookle Arena - Seismic Retrofit, Drag Strut to GYM Wall Connection	Install drag strut to GYM wall connection. Install steel straps across tongue & grove timber planking so the tension forces within the planks from the drag struts are resisted by the steel straps, not the planks themselves. These straps would be about 20 feet long and spaced every 2 to 4 feet. Each end of the steel straps would be bolted to the East-West CMU walls with drilled-in anchors. The project will significantly increase the seismic performance of the Ben Bookle Arena in a major seismic event. These modifications address the most serious structural deficiencies of the facility, and will greatly reduce the possibility of catastrophic building failure following a major seismic event, as well as mitigate damage to the facility, its contents and occupants. BNCHOL2-08/05/2007 23:44 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$23,285.00	75%	02020	
10	AK	1663	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0001	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	MOA Gas Shutoff Valves for municipal facilities Amendment #2	Install Seismic Gas Shutoff Valves for 21 MOA owned facilities-BNCHOL2-01/22/2008 11:53 GMT In State letter dated 04/15/09, AK has requested a change to the SOW of facilities mitigated from 21 to 17. This change also affects the overall project cost from \$163,327 to \$132,158 with this amendment will reflect-KCOX-04/23/2009 18:08 GMT AMENDMENT #1 is reduction of SOW from 21 to 17 facilities-SRANDOL-04/23/2009 21:10 GMT Amendment #2, this is to amend the project to show designation of funds due to cost underpin as requested by the state, letter received 09/07/2010-FKUNCHI-10/22/2010 21:42 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$111,884.00	75%	02020	
10	AK	1663	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0003	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	MOA Sullivan Arena Seismic Sprinkler Bracing Upgrade	Municipality of Anchorage, Sullivan Arena Seismic Sprinkler Bracing Upgrade Project-BNCHOL2-01/22/2008 23:13 GMT Municipality of Anchorage(MOA), Seismic Sprinkler Bracing for 8 MOA Facilities - BNCHOL2-01/22/2008 23:40 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$152,482.00	75%	02020	
10	AK	1663	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0005	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	MOA Seismic Sprinkler Bracing 8 Facilities - Amend 1 - Closeout	Amendment #1: This amendment is for designation of cost underpin for closeout, \$29,555 of total project cost per state letter 09/07/2010-FKUNCHI-10/15/2010 00:26 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$320,866.00	75%	02020	
10	AK	1663	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0006	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	MOA Ben Bookle Arena Seismic Retrofit N-S joint	Municipality of Anchorage, Ben Bookle Arena, Seismic Retrofit Seismic Joint N-S-BNCHOL2-01/22/2008 09:42 GMT Amendment #1: This amendment is to adjust the overall costs of this project because the state reported a cost underpin in their letter dated 09/07/2010. The following costs were deducted through the designation process on March 31, 2011: Fed Share \$51,921.00 Grantee Admin \$30,100 Sub-grantee Admin \$1,695.00 Note: The deobligated amount for this project is \$1,000 less than requested by the state due to the fact that in project 1653-1-R a deobligation was approved for \$1,000 over the state's requested amount and so the \$1,000 dollar adjustment is necessary in order to balance the whole disaster-FKUNCHI-04/04/2011 16:49 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$142,475.00	75%	02020	
10	AK	1663	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0007	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	MOA Ben Bookle Arena, Seismic Retrofit Shear Wall Reinforcement	Municipality of Anchorage (MOA) Ben Bookle Arena, Seismic Retrofit Shear Wall Reinforcement Project-BNCHOL2-01/22/2008 21:19 GMT Amendment #1: This amendment is to adjust the overall costs of this project because the state reported a cost underpin in their letter dated 09/22/2010. The following costs were deducted through the designation process on March 31, 2011: Fed Share \$15,921.00 Grantee Admin \$30,100 Sub-grantee Admin \$425.00 Note: The deobligated amount for this project is \$581.00 less than requested by the state due to the fact that the state needed to be credited \$581.00 in project 1653-1-R because the state requested a larger deobligation than they should have. It was not possible to credit project 1653-1-R directly so we are crediting within this project in order to make adjustments to balance the whole disaster-FKUNCHI-04/04/2011 16:49 GMT-FKUNCHI-04/04/2011 20:25 GMT	ANCHORAGE	Approved	ANCHORAGE MUNICIPAL MANAGER	99020	\$36,055.00	75%	02020	



(continued) **Table 6: Hazard Mitigation Grants**

[illegible]



(continued) Table 6: Hazard Mitigation Grants

Region	State	Disaster #	Declaration Date	Incident Type	Disaster Title	Project #	Project Type	Project Title	Project Description	Project Boroughs	Status	Subgrantee	Subgrantee FIPS Code	Project Amount	Cost Share Percentage	FIPS	CD
10	AK	1796	09/26/2008	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0003	602.1: Other Equipment Purchase and Installation Systems Project	City of Bethel Fort Dodge and Weather Radio Systems Project	Purchase and install one depth sensor to float, overlooks the Kuskokwim River and collect river level data in the summertime and snow depth level in the wintertime. A weather station will be purchased and installed outside the Port of Bethel office located near the Kuskokwim River in Bethel. Two all-hazard alert radios will be ordered to support the alert system. KCOX-04/05/2010 21:41 GMT	BETHEL (CA)	Approved	Bethel	6520	\$7,867.00	75%	00050	
10	AK	1072	10/13/1995	Flood	FLOODING	0005	500.2: Flood Control - Berm, Levee, or Dike	VALDEZ ALLOWE RIVER FLOOD MITIGATION PROJECT	PROVIDE RIPRAP PROTECTION TO AN EXISTING LEVEE BUILT USING FEMA'S CATEGORY B EMERGENCY ACTION AUTHORITY	CORVOVA	Closed	CITY OF VALDEZ	26382200	\$150,000.00	75%	02261	00037
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0008	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	SEWELL Drive Floodplain Acquisition Project Phase II	Acquire remaining properties in Sewell Subdivision Part I done in DR 1440 TSCANLAN-06/20/2005 16:35 GMT. This Amendment is to adjust the Final cost of the project down to \$100,024 based on the Alaska letter dated 1/28/2009. Original Total Project Cost was \$123,017. The cost overrun has already been designated in NEMIS SPANCOL 14/22/2009 00:12 GMT.	FAIRBANKS NORTH STAR	Approved	Fairbanks North Star Borough	99990	\$100,924.00	75%	00390	
10	AK	1584	03/14/2005	Severe Storm(s)	SEVERE WINTER STORM	0004	301.1: Shoreline Stabilization (Riprap, etc.)	AK RR MP 407.4 Bank Stabilization on Sevens Mile Slough	Place riprap along side track to provide erosion control 200 ft where stream meets track. TSCANLAN-07/12/2005 14:24 GMT. Amendment #1: This Amendment is to adjust the overall costs of this project because the State reported a cost overrun in their letter dated January 26, 2009. The following costs were deducted: The Deduction was processed on March 6, 2009: FED Share - \$9,339.00 Grantee Admin Allowance - \$173.00 Sub Grantee Admin Allowance - \$334.09 KCOX-04/09/2009 22:23 GMT SPANCOL 1-10/05/2009 22:41 GMT	FAIRBANKS NORTH STAR, STATEWIDE	Approved	ALASKA RAILROAD CORPORATION	0	\$44,081.00	75%	00390	
10	AK	1796	09/26/2008	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0012	91.1: Local Multi-hazard Mitigation Plan	Mt. Juneau Active Avalanche Control Study	The City & Borough of Juneau (CBJ) will contract with the Swiss Institute for Snow and Avalanche Research to perform a focused analysis of the Mount Juneau Avalanche Area and produce a study of possible applications to outline which mitigation systems would be most effective against future avalanches and add valuable information from the study to their LHMIP. KCOX-08/18/2010 20:56 GMT	JUNEAU	Approved	Juneau	36400	\$94,500.00	75%	02110	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0001	401.1: Water and Sanitary Sewer System Protective Measures	Bishop property install well and septic		KENAI PENINSULA	Approved	ALASKA DEPT. OF COMMUNITY & ECONOMIC DEVELOPMENT	0	\$9,475.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0004	91.1: Local Multi-hazard Mitigation Plan	City of Homer Hazard Mitigation Plan		KENAI PENINSULA	Approved	Homer	33140	\$1,573.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0008	409.2: Stormwater Management - Diversion	50. Peninsula loop hillside runoff water diversion and drainage	Divert hillside water runoff by cutting back slope and re-routing run-off to natural drainage away from hospital offices and reception area. TSCANLAN-09/24/2004 15:26 GMT	KENAI PENINSULA	Approved	SOUTH PENINSULA HOSPITAL	33140	\$96,360.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0009	409.1: Stormwater Management - Culverts	City of Seward Dairy Hill Lateral Culvert Replacement	RESIZE AND REALIGN CULVERTS ON DAIRY HILL LANETSCANLAN: 11/16/2004 15:22 GMT	KENAI PENINSULA	Approved	SEWARD CITY MANAGER	99122	\$0.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0010	402.1: Infrastructure Protective Measures (Roads and Bridges)	Machukuk side road elevation	Raise side entrance road 3 feet to prevent isolation from flood event TSCANLAN-11/16/2004 21:42 GMT	KENAI PENINSULA	Approved	Nachikuk Sldo	36600	\$0.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0011	401.1: Water and Sanitary Sewer System Protective Measures	City of Seward lift rational control reconfiguration	raise controls above 100' yr flood level TSCANLAN: 11/15/2004 16:16 GMT	KENAI PENINSULA	Approved	SEWARD CITY MANAGER	99122	\$90,000.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0012	301.1: Shoreline Stabilization (Riprap, etc.)	Alaska Railroad MP 29	Amend #2: Closeout and cost overrun per State's letter of December 12, 2008. Technical data, etc. provided on a CD. Payment files to be attached into NEMIS. Major cost overrun. SPANCOL 14/20/2009 18:36 GMT	KENAI PENINSULA	Approved	ALASKA RAILROAD CORPORATION	0	\$118,498.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0013	301.1: Shoreline Stabilization (Riprap, etc.)	Alaska RR MP 8 to 23 Embankments		KENAI PENINSULA	Approved	ALASKA RAILROAD CORPORATION	0	\$335,211.00	75%	02122	
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0017	402.1: Infrastructure Protective Measures (Roads and Bridges)	Mudflat River Road Relocation	Relocate existing road from top of river bank that is subject to erosion and washout. TSCANLAN-07/11/2005 15:56 GMT	KENAI PENINSULA	Approved	Kenai Peninsula Borough	99122	\$187,406.00	75%	02122	
10	AK	1796	09/26/2008	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0001	91.1: Local Multi-hazard Mitigation Plan	City of Seldovia, Local Hazard Mitigation Plan	City of Seldovia, utilizing City staff, will develop a FEMA and State of Alaska Approved, Local Hazard Mitigation Plan. SPANCOL 2: 11/20/2009 22:30 GMT	KENAI PENINSULA	Approved	Seldovia	68940	\$20,540.00	75%	02122	
10	AK	1843	06/11/2009	Flood	FLOODING AND ICE JAMS	0002	91.1: Local Multi-hazard Mitigation Plan	LUMP Armer - Flood Risk Assessment for Adaptive Management & Mitigation Projects	The annex will substantiate future conditions, hazard identification and risk assessment that support the development and evaluation of adaptive options. Additionally, the annex will serve to realize the following short-term outcomes: 1. A revision to the Local Flood Hazard Mitigation Plan developed by the Seward Bear Creek Flood Service Area (SBCFSA). 2. An addendum to the Kenai Peninsula Borough (KPB) All-Hazards Mitigation Plan (SBCFSA). 3. A prioritization summary delineating mitigation projects to be completed within the SBCFSA. 4. Will meet the need to develop a working plan that has been requested by the City of Seward, SBCFSA and the Borough (reference current LHM plans and borough AHMP). -BNICHO2:11/7/2010 18:50 GMT	KENAI PENINSULA	Pending	Kenai Peninsula Borough	99122	\$330,220.00	75%	02122	
10	AK	1072	10/13/1995	Flood	FLOODING	0002	402.1: Infrastructure Protective Measures (Roads and Bridges)	ALASKA RAILROAD CORPORATION, SALMON CREEK RR BRIDGE REPLACEMENT	REPLACE FIVE UNKED 14' TIMBER TRISTLE SPANS THAT COLLECT DEBRIS WITH A SINGLE 70' FOOT CLEAR SPAN BRIDGE.	KENAI PENINSULA	Closed	ALASKA RAILROAD	92031	\$45,600.00	75%	02122	
10	AK	1072	10/13/1995	Flood	FLOODING	0004	601.1: Warning Systems (as a Component of a Planned, Adopted, and Exercised Risk Reduction Plan)	THREE MOBILE SIRENS AND NOAA WEATHER TRANSMITTER PURCHASE	In order to improve the warning capabilities in flood hazard areas the KPB would like to purchase three siren units to sit on the back of the four-wheel drive pickup truck to warn those not currently served by the boroughs	KENAI PENINSULA BOROUGH	Closed	KENAI PENINSULA BOROUGH	1220000	\$99,990.00	75%	02122	
10	AK	1072	10/13/1995	Flood	FLOODING	0006	402.1: Utility Protective Measures (Electric, Gas, etc.)	CITY OF SEWARD, CULVERT UPGRADES & ELEVATION OF PUMP STATION	INCREASE FLOW CAPACITY OF THE CULVERTS UNDERNEATH FOURTH AVENUE (FISH DITCH) AND DAIRY HILL ROAD. ELEVATE THE CONTROLS OF A DOWNTOWN SEWER LIFT STATION	KENAI PENINSULA BOROUGH	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$297,779.00	75%	02122	



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Region	State	Disaster #	Declaration Date	Incident Type	Disaster Title	Project #	Project Type	Project Title	Project Description	Project Boroughs	Status	Subgrantee	Subgrantee HPS Code	Project Amount	Cost Share Percentage	CID
10 AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	91.1 Local Multi-hazard Mitigation Plan	0003	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	City of Seward Hazard Mitigation Plan	Amendment #1: This amendment is to process cost underpins for this project in the amount of FED Share - \$308 Grantee Admin Allowance - \$348 Sub-Grantee Admin Allowance - \$629-ACOX-03/10/2009 21:56 GMT The Declaration was made July 2, 2008, however the Amendment to reauthorize the budget and disburse the project was overlooked. SPANCOL11/03/09 21:42 GMT Correction: This Amendment #1 is to process cost underpins for this project in the amounts of FED Share -\$308 Grantee Admin Allowance -\$3 Sub-Grantee Admin Allowance -\$158-ACOX-002/04/2009 18:59 GMT	KENAI PENINSULA STATEWIDE	Approved	SEWARD CITY MANAGER	99122	\$14,599.00	75%	02122
10 AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	0009	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	Quikrete School Foundation Retrofit Project	Reinforcement of foundation of library, two story structure approx 15,840 sq-ft. 07/12/2005 18:35 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$301,318.00	75%	02150
10 AK	1584	03/14/2005	Severe Storm(s)	SEVERE WINTER STORM	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	0003	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	Kodlak High School Library Wing Seismic Retrofit	Seismic retrofit of foundation of library, two story structure approx 15,840 sq-ft. 07/12/2005 18:35 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$465,508.00	75%	02150
10 AK	1618	12/09/2005	Severe Storm(s)	SEVERE FALL STORM, TIDAL SURGES, AND FLOODING	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	0002	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	Kodlak Island Borough, East Elementary School Window Seismic Upgrade	The Kodlak East Elementary School has substantial structural seismic vulnerabilities, including the large single pane classroom windows original to the school. Kodlak is a very high seismic hazard area and includes a high level of seismic risk and hazard. The school building is a historic building and has significant cultural and historical value. The building has economic loss, but also a high potential for deaths and injuries in future earthquakes. BNCHOL2-01/10/2007 19:55 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$134,917.00	75%	02150
10 AK	1657	08/04/2006	Flood	SNOW MELT AND ICE JAM FLOODING	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	0003	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	Kodlak is Borough Fire Sprinkler Seismic Upgrade	Seismic upgrade for sprinkler systems in the Kodlak Island Borough Schools. This non-structural seismic mitigation project addresses the following buildings: Kodlak High School, Middle School, Main Elementary and East Elementary in Kodlak City, Chinak School, and four remote village schools: Old Harbor, Kotlik, Ahnik, and Larson Bay. In addition, the project also includes the Kodlak Island Borough Building. More than 90% of the sprinkler retrofits are in the MBI Bay complex or very nearby, with less than 10% in other locations. The as-is fire sprinkler pose a substantial seismic risk. The only alternative to provide the safety to the occupants of these building, preserve the function of the building and protect the emergency response personnel is to upgrade the existing fire sprinkler system to seismic resistant. The proposed project is to upgrade the fire sprinkler system to seismic resistant. The proposed project is to primarily reduce the potential for leakage for sprinkler heads and pipes from differential movement between the suspended ceilings and the sprinkler heads and pipes by addition of larger escutcheon rings around the sprinkler heads to allow more differential movement without breaking the sprinkler heads. In addition, a limited amount of pipe retrofits may be added to the sprinkler system to further stabilize the sprinkler.	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$46,630.00	75%	02150
10 AK	1660	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	0002	205.4. Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	KB Schools Non-Structural (MEF) Seismic Strapping	Kodlak Island Borough (KB) Schools Non-Structural Seismic Mechanical, Electrical and Plumbing (MEP) Strapping Project. BNCHOL-01/02/2008 22:48 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$132,249.00	75%	02150
10 AK	1663	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	0004	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	KB Peterson School Seismic Retrofit - Closeout Amend	Kodlak Island Borough (KB) Peterson Schools Seismic Retrofit Project. BNCHOL-01/02/2008 09:22 GMT AMEND #1: This Amendment is to deduct \$239 of unused Grantee Admin funds as requested by State's Closeout letter dated May 11, 2010. SPANCOL11/07/2010 23:09 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$545,508.00	75%	02150
10 AK	1660	10/16/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	0009	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	KB Schools Non-Structural Seismic Bracing - Closeout Amend	Kodlak Island Borough (KB) Schools, Non-Structural Seismic Mitigation Bracing Project. BNCHOL-02/10/2008 0:05 GMT AMEND #1: This Amendment is to deduct \$4,445 Fed Share, \$591 Grantee Admin & \$119 of Sub-Grantee Admin funds for a total of \$5,155 as requested by State's Closeout letter dated May 11, 2010. SPANCOL11/07/2010 22:16 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$69,554.00	75%	02150
10 AK	1796	09/16/2008	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	0009	205.5. Structural Retrofitting/Rehabilitating Public Structures - Seismic	KB Middle School Seismic Retrofit Project	The as-is gym structure has critical deficiencies in the roof diaphragm. The metal pan deck is in poor condition and is not designed to transfer the seismic loads. The roof is insufficient to transfer the design seismic loads through the diaphragm and to shear walls. The results in potential collapse for long duration ground motions much above 0.30 g, a level of shaking which is well below the 2% in 50 year ground motion of 0.56 g that the remainder of the structure was retrofitted. Thus, the as-is building unequivocally poses a high and unacceptable level of life safety risk. The high level of life safety risk is completely unacceptable to the citizens of Kodlak. The proposed seismic retrofit project for the KMS Gym directly addresses this remaining life safety risk of the building. The retrofit design to mitigate the structural weaknesses in the KMS Gymnasium includes adding a diagonal bracing system consisting of steel pipe to the underside of the gym roof trusses and attaching epoxy embeds to transfer loads into the shear resisting elements. The upgrade will provide good life safety assurance at PGA = 0.56 g. The increases stiffness of the building will limit damage at lower PGA levels. -ACOX-04/09/2010 17:18 GMT	KODIAK ISLAND	Approved	Kodlak Island (Borough)	99130	\$465,000.00	75%	02150
10 AK	832	06/10/1989	Flood	FLOODING	104.1. Developing, Implementing and Enforcing Codes, Standards, Ordinances and Regulations	0005	104.1. Developing, Implementing and Enforcing Codes, Standards, Ordinances and Regulations	FLOODPLAIN DRAINAGE	DEVELOP MODEL ORDINANCES AND ASSIST LOCAL GOVERNMENTS IN ENFORCING THEM. THE EMPHASIS IS ON LOCAL GOVERNMENTS ADOPTING THE BFE LEVELS AND EROSION SETBACK DISTANCES SPECIFIC TO THEIR	MATANUSKA SUSTINA	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$19,994.00	50%	02170
10 AK	832	06/10/1989	Flood	FLOODING	104.1. Developing, Implementing and Enforcing Codes, Standards, Ordinances and Regulations	0006	104.1. Developing, Implementing and Enforcing Codes, Standards, Ordinances and Regulations	ADMINISTRATIVE ORDER	DEVELOPMENT OF DRAFT ADMINISTRATIVE ORDER	MATANUSKA SUSTINA	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$7,009.00	50%	02170
10 AK	832	06/10/1989	Flood	FLOODING	700.1. Management Costs - Salaries	M001	700.1. Management Costs - Salaries	STATE MANAGEMENT COST	STATE MANAGEMENT COST	MATANUSKA SUSTINA	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$26,000.00	50%	02170
10 AK	832	06/10/1989	Flood	FLOODING	100.1. Public Awareness and Education (Brochures, Workshops, Videos, etc.)	0003	100.1. Public Awareness and Education (Brochures, Workshops, Videos, etc.)	PUBLIC AWARENESS	PRODUCTION OF PUBLIC SERVICE ANNOUNCEMENTS FOR TV AND RADIO/PRODUCTION OF TRAINING FILM/PUBLICATION OF PUBLIC AWARENESS BROCHURE/DESIGN AND PUBLICATION OF POSTERS.	MATANUSKA SUSTINA	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$52,797.00	50%	02170
10 AK	832	06/10/1989	Flood	FLOODING	103.1. Feasibility, Engineering and Design Studies	0004	103.1. Feasibility, Engineering and Design Studies	BAFE FLOOD ELEVATIONS GUIDE	ESTABLISH BFEs IN COMMUNITIES IMPACTED BY THE 1998 FLOOD	MATANUSKA SUSTINA	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$27,424.00	50%	02170



(continued) Table 6: Hazard Mitigation Grants

Region	State	Disaster #	Declaration Date	Incident Type	Disaster Title	Project #	Project Type	Project Title	Project Description	Project Boroughs	Status	Subgrantee	Subgrantee RIFS Code	Project Amount	Cost Share Percentage	RIFS	CD
10	AK	1461	04/26/2003	Severe Storm(s)	SEVERE WINTER STORM, INCLUDING HIGH WINDS AND FREEZING TEMPERATURES	0002	205.8: Retrofitting Public Structures - Wind retrofits	Mat Su Borough - School Roof Strapping (wind retrofits)	Install stepping securement systems on the insulated roof membrane assemblies at 8 school buildings within the Mat Su Borough. RJONES2-09/26/2004 17:31 GMT Original project application issued (5) nine school sites for wind retrofitting. However, upon review of the project, it was determined that the project was not feasible due to the fact that the buildings were not suitable for wind retrofitting. The project was then revised to include the installation of wind resistant doors and windows at the following schools: Wadika H.S., Wadika M.S., and Pioneer Peak Elementary. Wind resistant doors and windows were incompatible with the strapping system. A fourth school, Palmer H.S., needed a complete roof replacement. Based on this information, the applicant requested a revision of the Scope of Work to drop from (5) nine to (6) five schools for this project. These projects have been inspected for Project compliance by the State staff and have been approved. (Report on the project is available at: http://www.alaska.gov/arc/COX-1102/2007.21.26.GMT This project is now closed: http://www.alaska.gov/arc/COX-1102/2007.21.26.GMT	MATANUSKA-SUSTINA	Approved	MATANUSKA-SUSTINA BOROUGH	99170	\$210,776.00	75%	02170	
10	AK	1461	04/26/2003	Severe Storm(s)	SEVERE WINTER STORM, INCLUDING HIGH WINDS AND FREEZING TEMPERATURES	0004	91.1: Local Multi-hazard Mitigation Plan	Wadika hazard mitigation plan	mitigation plan-TSCANLAN-11/02/2004 14:57 GMT was not on city list-TSCANLAN-11/02/2004 15:06 GMT	MATANUSKA-SUSTINA	Approved	Wadika	83080	\$9,865.00	75%	02170	
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0004	91.1: Local Multi-hazard Mitigation Plan	Ma-Ni-Su All Hazard Mitigation Plan		MATANUSKA-SUSTINA	Approved	MATANUSKA-SUSTINA BOROUGH	99170	\$9,566.00	75%	02170	
10	AK	1669	10/26/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0008	301.1: Shoreline Stabilization (Riprap, etc.) 402.1: Infrastructure Protective Measures (Roads and Bridges)	ABRC MP 254.4 Sustina River Embankment Stabilization	Alaska Railroad Corporation, Mile Post 254.8 of the Sustina River, Embankment Stabilization Project. BNCHOL2-01/12/2009 21:34 GMT	MATANUSKA-SUSTINA	Approved	ALASKA RAILROAD CORPORATION	0	\$91,844.00	75%	02170	
10	AK	1669	12/06/2006	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	0002	301.1: Shoreline Stabilization (Riprap, etc.)	ABRC MP 247.2 Embankment Protection Project	The Alaska Railroad Corporation (ARRC) Sustina River Embankment Stabilization Project is at Milepost 247.2 and will utilize rip-rap to stabilize the track/embankment from future flooding events. BNCHOL2-02/12/2009 00:09 GMT	MATANUSKA-SUSTINA	Approved	ALASKA RAILROAD CORPORATION	0	\$339,727.00	75%	02170	
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0009	602.1: Other Equipment Purchase and Installation and FLOODING	City of Nome Museum sump pump in a battery back up	Install sump pump w battery backup for museum-TSCANLAN-01/11/2006 21:01 GMT	NOME (CA)	Approved	NOME	56920	\$6,944.00	75%	02180	
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0005	91.1: Local Multi-hazard Mitigation Plan	City of Golovin Planning Grant	Relocate computer building at risk from coastal erosion-TSCANLAN-04/24/2006 15:01 GMT	NOME (CA)	Approved	Shishmaref	69770	\$45,942.00	75%	02180	
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0005	91.1: Local Multi-hazard Mitigation Plan	Northwest Arctic Borough Multi Jurisdictional Mitigation Plan	All hazard local mitigation plan-TSCANLAN-04/24/2006 15:01 GMT	NORTHWEST ARCTIC	Approved	Golovin	29180	\$10,000.00	75%	02180	
10	AK	1039	09/13/1994	Severe Storm(s)	SEVERE STORMS AND FLOODING	M001	700.1: Management Costs - Salaries	STATE MANAGEMENT COST	THIS PROJECT WILL FIND THE COSTS NECESSARY TO ADMINISTER THE HMPG (STAFFING) FOR DE-1072-AK	STATEWIDE	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$82,824.00	75%		
10	AK	1072	10/13/1995	Flood	FLOODING	M001	700.1: Management Costs - Salaries	STATE MANAGEMENT COST	State Management Costs to provide salaries for State staff-RJONES2-11/02/2004 17:53 GMT	STATEWIDE	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$146,714.00	75%		
10	AK	1316	02/17/2000	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	0004	700.1: Management Costs - Salaries	State Management Costs	2nd submittal of Research Assistant-RJONES2-01/13/2003 17:22 GMT	STATEWIDE	Approved	Statewide	0	\$22,756.00	75%		
10	AK	1316	02/17/2000	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	0005	92.1: State Multi-hazard Mitigation Plan	AK State Hazard Mitigation Plan Research Assistant - II	Phase 1 completed and engineering study complete Phase two is to evaluate 2 dwellings in Red Devil and 4 dwellings in Steeseville-TSCANLAN-06/03/2005 15:01 GMT	STATEWIDE	Approved	Statewide	0	\$93,974.00	75%		
10	AK	1429	06/26/2002	Flood	FLOODING	0002	700.2: Management Costs - Equipment, Management Costs - Supplies	State Management Costs	Amend #1 reduce the Total Project Cost by a slight cost underun reported in the State's closure letter of 12/09/09. \$86,517 Total Original Approved Project Cost has been reduced to \$84,911 Final Project Cost. SRANDOL1-02/21/2009 01:09 GMT	STATEWIDE	Approved	Statewide	0	\$47,358.00	75%		
10	AK	1429	06/26/2002	Flood	FLOODING	0005	103.1: Feasibility, Engineering and Design Studies 102.1: Erection of Private Structures - Inverness Combined Project	State Management Costs	Construct berm and elevate existing track to provide 100 yd flood protection at MP 36 of Alaska Railroad-TSCANLAN-08/16/2004 17:33 GMT	STATEWIDE	Approved	Statewide	0	\$84,911.00	75%		
10	AK	1445	12/04/2002	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0002	700.1: Management Costs - Salaries	State Management Costs	Amendment #1 to 4 info will be provided below. Amendment #5: The Amendment is to reconcile the Final Financial statement submitted by the State of AK in their HMPG Disaster Closure letter dated March 2, 2009. This letter identified the need for a de-obligation of unspent Grantee Admin Allowance funds in the amount of \$5,117. This project was selected to withdraw funds from due to this project's stable Grantee Admin Allowance. This will allow FEMA staff to close this disaster. KCOX-10/26/2009 17:05 GMT-SRANDOL1-02/21/2009 01:09 GMT	STATEWIDE	Approved	ALASKA RAILROAD CORPORATION	0	\$519,000.00	75%		
10	AK	1461	04/26/2003	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND TIDAL SURGE	0006	402.1: Infrastructure Protective Measures (Roads and Bridges) 500.2: Flood Control - Bern, levee, or dike	ABRC Corp MP 36 track elevation	6/20/07 State requested closure of State MP Costs for DS 1461 and HMPG closure for 1461. State reports a cost underun on SMC of \$14,596. This requires a de-obligation of \$10,946 Fed share. This amendment balances the Cost Estimate and Match Sources with the State's request and recent deobligations and deobligations. State submitted Pay Period expenses by employees, as well as supplies expenses from FY2003 through April 30, 2007. Kim Perloff approved Final Financial Report on July 24, 2007. SRANDOL1-08/15/2007 23:08 GMT	STATEWIDE	Approved	Statewide	0	\$21,853.00	75%		
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0001	700.1: Management Costs - Salaries	State Management Costs	Earthquake notification system for ADES and the SECC-TSCANLAN-06/02/2006 19:28 GMT Amend # was necessary in order to Deobligate \$1 in unexpended Sub-grantee Admin Costs per State closure letter of 12/03/2009-SRANDOL1-02/21/2009 01:09 GMT	STATEWIDE	Approved	ALASKA RAILROAD CORPORATION	0	\$31,730.00	75%		
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0006	402.1: Utility Protective Measures (Electric, Gas, etc.)	AK RR MP 255.1 Sustina River area Embankment Protection	Earthquake notification system for ADES and the SECC-TSCANLAN-06/02/2006 19:28 GMT Amend # was necessary in order to Deobligate \$1 in unexpended Sub-grantee Admin Costs per State closure letter of 12/03/2009-SRANDOL1-02/21/2009 01:09 GMT	STATEWIDE	Approved	ALASKA RAILROAD CORPORATION	0	\$31,730.00	75%		
10	AK	1571	11/15/2004	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	0007	600.1: Warning Systems (as a Component of a Plan)	AEC Earthquake Notification and Display System for ADES/SECC	Provide and display year-real-time earthquake information to SDRS/SECC and local emergency Operations centers-TSCANLAN-07/11/2006 20:54 GMT	STATEWIDE	Approved	UNIVERSITY OF ALASKA-FAIRBANKS	99090	\$34,960.00	75%		
10	AK	1584	03/14/2005	Severe Storm(s)	SEVERE WINTER STORM	0005	600.1: Warning Systems (as a Component of a Plan)	AEC Earthquake Notification and Display System Phase II	This Amendment is to de-obligate \$40,271 in unused funds to reconcile this disaster for Closure. KCOX-12/12/2009 31:29 GMT	STATEWIDE	Approved	Statewide	0	\$21,343.00	75%		
10	AK	1584	03/14/2005	Severe Storm(s)	SEVERE WINTER STORM	0006	700.1: Management Costs - Salaries	State Management Grant - Closure Ineed		STATEWIDE	Approved	Statewide	0	\$29,376.00	75%		
10	AK	1610	12/09/2005	Severe Storm(s)	SEVERE WINTER STORM AND FLOODING	0001	700.1: Management Costs - Salaries	AKAC		STATEWIDE	Approved	Statewide	0	\$29,376.00	75%		



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 6: Hazard Mitigation Grants

Region	State	Disaster #	Declaration Date	Incident Type	Disaster Title	Project #	Project Type	Project Title	Project Description	Project Boroughs	Status	Subgrantee	Subgrantee FPS Code	Project Amount	Cost Share Percentage	FPS	CD
10	AK	1618	12/09/2005	Severe Storm(s) AND FLOODING	SEVERE FALL STORM, TIDAL SURGES, AND FLOODING	0003	901.1: Shoreline Stabilization (Riprap, etc.)	MP 360.3 Embankment Protection Project	Place riprap along the track to provide erosion control. Approx. 1,980 tons of material will be placed where the stream meets the track. -BNCHOL2-01/18/2007 21:05 GMT	STATEWIDE	Approved	ALASKA RAILROAD CORPORATION	0	\$31,517.00	75%		
10	AK	1657	08/04/2006	Flood	SNOW MELT AND ICE JAM FLOODING	0004	700.1: Management Costs - Salaries	State Grant Management Cost	AMEND #2: Cost underpin of \$47.4K - dedication requested by State 10/27/2009 - SRANDOL1-02/26/2010 01:46 GMT State Mitigation Grant Program (HMGP) Management Costs are for DHS/SEM personnel to provide grant management of the hazard mitigation grant projects for FEMA 1657 DR- AK. Reimbursement for these costs are essential to enable the State to manage this highly effective mitigation grant program. The projected funding amount of 12% is based on historical estimated expenditures for the life of the grant. Actual expenditures will be billed upon close-out of the grant. -BNCHOL2-08/02/2007 17:54 GMT	STATEWIDE	Approved	Statewide	0	\$33,572.00	75%		
10	AK	1660	10/16/2006	Severe Storm(s)	SEVERE STORMS: FLOODING, LANDSLIDES, AND MUDSLIDES	0010	700.1: Management Costs - Salaries	DHS/SEM State Grant Management	State Grant Management costs (calculated at 11.61% of the total Fed/State Award of \$119,951.00) -BNCHOL2-01/22/2009 19:40 GMT The purpose of this grant is to offset the special costs of State Management Costs because the state expects a declaration in their letter dated 9/25/2010. The following costs were deducted through the designation process on March 31, 2011. Fed Share: \$163,213.00	STATEWIDE	Approved	Statewide	0	\$29,431.00	75%		
10	AK	1669	12/09/2005	Severe Storm(s)	SEVERE STORMS: FLOODING, LANDSLIDES, AND MUDSLIDES	0004	700.1: Management Costs - Salaries	DHS/SEM State Grant Management Costs: Amendment 1	The State of Alaska, Division of Homeland Security and Emergency Management (DHS/SEM) Project for managing the State Management Costs (SMC) for HMGP projects associated with DR-1669 -BNCHOL2-02/11/2009 20:27 GMT	STATEWIDE	Approved	Statewide	0	\$29,999.00	75%		
10	AK	1796	09/16/2006	Severe Storm(s)	SEVERE STORMS: FLOODING, LANDSLIDES, AND MUDSLIDES	0010	700.1: Management Costs - Salaries; 700.2: Management Costs - Equipment; 700.3: Management Costs - Office Space Rental; 700.4: Management Costs - Supplies	DHS/SEM Grantee Management Costs	Amendment 1: Designation for cost underpin at closeout. Per the State's closeout letter of 02/25/2010, the state has only expended \$17,554.00 Fed share, and is requesting a Designation of \$87,572.00 Fed share. -FKUNCH1-07/15/2011 19:26 GMT	STATEWIDE	Approved	Statewide	0	\$114,474.00	100%		
10	AK	1849	06/11/2009	Flood	FLOODING AND ICE JAMS	0001	700.1: Management Costs - Salaries; 700.2: Management Costs - Equipment; 700.3: Management Costs - Office Space Rental; 700.4: Management Costs - Supplies	State Management Costs	324 SMC is 100% Fed Funded -BNCHOL2-11/17/2010 00:18 GMT The State of Alaska, Hazard Mitigation Grant Program (HMGP) State Management Costs (SMC) are for State personnel salary and other additional costs for continuing management of the HMGP projects for FEMA DR-1849-AK. Reimbursements for these costs are essential to enable the State to manage this highly effective mitigation grant program. The costs are based on actual and estimated expenditures for the life of the grant, estimated at four years from the disaster declaration date of June 11, 2009. The amount calculated by FEMA and reimbursed by FEMA 100% to State Management Costs associated with the submitted HMGP Projects is \$195,319.00. -FKUNCH1-08/02/2011 18:45 GMT	STATEWIDE	Pending	Statewide	0	\$196,319.00	100%		
10	AK	1039	09/13/1994	Severe Storm(s)	SEVERE STORMS AND FLOODING	0002	201.1: Relocation of Private Structures - Riverine	Relocation of Alaska	Relocate the village of Alaska to a bluff SW of the present townsite. Project includes relocating 15 homes and three public buildings (partial 405 funding) (PARTIAL 405 FUNDING).	UNINCORPORATED	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$8,429,993.00	75%		
10	AK	1039	09/13/1994	Severe Storm(s)	SEVERE STORMS AND FLOODING	0003	201.1: Relocation of Private Structures - Riverine	Alakalek Relocation/Reconstruction	Prevent future flooding and provide a safe place of refuge by completing Phase 1 of the Alakalek relocation project. This includes the relocation of 15 HUD housing units along with the relocation of required road, power, and telephone service, and the relocation of the community center.	YUKON-OTKUYUK	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$1,328,065.00	69%	02290	
10	AK	1039	09/13/1994	Severe Storm(s)	SEVERE STORMS AND FLOODING	0004	404.1: Localized Flood Control System to Protect Critical Facility	Ennisville Landfill Relocation	To prevent future flood devastation to Ennisville by relocating the landfill and access road out of the 100 year floodplain. The landfill will be relocated 1.3 miles se of the village.	YUKON-OTKUYUK	Closed	ALASKA DIVISION OF EMERGENCY SERVICES	91000	\$921,989.00	75%	02290	
10	AK	1072	10/13/1995	Flood	FLOODING	0003	501.1: Other Major Structural Projects	Restoration River Flood Reduction Project	As part of a comprehensive multi-project solution to flooding problems in the Kenai Peninsula Borough and the City of Seward, this component project will involve the one-time removal of accreted debris near the river delta (companion projects include the widening of upstream bridges and the construction/expansion of levees).	KENAI PENINSULA	Closed	KENAI PENINSULA BORO	12200000	\$309,076.00	75%	02122	
10	AK	1316	02/17/2000	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	0001	201.1: Relocation of Private Structures - Riverine	Acquisition/Relocation of Structures in City of Cordova	Acquisition/Relocation -ASMITHS-02/25/2003 21:06 GMT	VALDEZ-CORDOVA (CA)	Approved	Cordova	17410	\$738,920.00	75%	02261	
10	AK	1316	02/17/2000	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	0002	201.1: Relocation of Private Structures - Riverine	Relocation/Acquisition of Structures in the City of Valdez	FAST TRACK-RUONES-02/25/2003 21:46 GMT	VALDEZ-CORDOVA (CA)	Approved	Valdez	82200	\$1,165,202.00	75%	02261	
10	AK	1445	12/04/2001	Severe Storm(s)	SEVERE WINTER STORMS: FLOODING, COASTAL EROSION AND TIDAL SURGE	0007	205.4: Non Structural Retrofitting/Rehabilitating Public Structures - Seismic	Copper River School Dist Anchor Interior Elements	Project withdrawn by State-TSCANLAN-05/10/2007 14:55 GMT	VALDEZ-CORDOVA (CA)	Approved	COPPER RIVER SCHOOL DISTRICT (RELA)	17350	\$0.00	75%	02261	
10	AK	1423	06/16/2002	Flood	FLOODING	0003	201.1: Relocation of Private Structures - Riverine; 201.3: Relocation of Public Structures - Riverine; 201.3: Elevation of Private Structures - Riverine;	City of Alakanuk - Relocate and Elevate homes and City Building	Project withdrawn by State-TSCANLAN-05/10/2007 14:55 GMT	WADE-HAMPTON (CA)	Approved	Alakanuk	1200	\$278,530.00	75%	02270	
10	AK	1594	09/14/2005	Severe Storm(s)	SEVERE WINTER STORM	0002	91.1: Local Multi-hazard Mitigation Plan	Nunam Iqua Mitigation Plan	Amend #1: the purpose is to designate a \$505 Fed Share cost underpin, associated with Closures of this project. The near final Plan was completed and approved by FEMA on December 17, 2008 -SRANDOL1-03/06/2009 20:03 GMT	WADE-HAMPTON (CA)	Approved	Nunam Iqua	56600	\$9,292.00	75%	02270	
10	AK	832	06/10/1989	Flood	FLOODING	0010	400.1: Utility Protective Measures (Electric Gas, etc.)	ELEVATING HOUSE UTILITIES		YUKON-OTKUYUK	Closed	ALAKALEK	29001860	\$51,486.00	50%	02290	
10	AK	832	06/10/1989	Flood	FLOODING	0011	400.1: Utility Protective Measures (Electric Gas, etc.)	RELOCATION	Relocation of two utility buildings	YUKON-OTKUYUK	Closed	ALAKALEK	27001200	\$96,000.00	50%	02290	
10	AK	832	06/10/1989	Flood	FLOODING	0012	500.2: Flood Control - Rem. Levee, or Dike (PART #2)	CITY OF FORT YUKON, LEVEE CONSTRUCTION (PART #2)	Constructed a ring levee around the City of Fort Yukon.	YUKON-OTKUYUK	Closed	FORT YUKON	29025760	\$807,662.00	17%	02290	



Table 7: Alaska Disaster Declarations
**Used for 2011 Alaska Risk MAP Prioritization Algorithm*

Disaster Number	IF Program Declared	IA Program Declared	PA Program Declared	HIM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
1843	Yes	No	Yes	Yes	6/11/2009	FEIMA-DR	Flood	FLOODING AND ICE JAMS	4/26/2009	5/31/2009		Alaska Gateway Regional Educational Attendance Area	Southeast Fairbanks	02240		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Aleutians East (Borough)	Aleutians East	02013		0
1072	No	No	Yes	Yes	10/13/1995	FEIMA-DR	Flood	FLOODING	9/18/1995	10/10/1995	3/10/2006	Anchorage (Borough)	Anchorage	02020		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Anchorage (Borough)	Anchorage	02020		0
1461	Yes	Yes	Yes	Yes	4/26/2003	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORM, INCLUDING HIGH WINDS AND FREEZING	3/6/2003	3/14/2003	8/12/2010	Anchorage (Borough)	Anchorage	02020		0
1571	No	No	Yes	Yes	11/15/2004	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	10/18/2004	10/24/2004	3/22/2011	Bering Strait Regional Educational Attendance Area	Nome	02180		0
1618	No	No	Yes	Yes	12/9/2005	FEIMA-DR	Severe Storm(s)	SEVERE FALL STORM, TIDAL SURGES, AND FLOODING	9/22/2005	9/26/2005		Bering Strait Regional Educational Attendance Area	Nome	02180		0
832	No	Yes	Yes	Yes	6/10/1989	FEIMA-DR	Flood	FLOODING	5/11/1989	6/10/1989	3/18/1998	Bethel (Census Area)	Bethel	02050		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Bethel (Census Area)	Bethel	02050		0
1423	No	Yes	Yes	Yes	6/26/2002	FEIMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Bethel (Census Area)	Bethel	02050		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Bristol Bay (Borough)	Bristol Bay	02060		0
1445	Yes	Yes	Yes	Yes	12/4/2002	FEIMA-DR	Severe Storm(s)	FLOODING, COASTAL EROSION AND FLOODING	10/23/2002	12/20/2002		Chignik Lagoon (ANV/ANVSA)	Lake and Peninsula	02164		0
1445	Yes	Yes	Yes	Yes	12/4/2002	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND FLOODING	10/23/2002	12/20/2002		Chignik Lake (ANV/ANVSA)	Lake and Peninsula	02164		0
1663	No	No	Yes	Yes	10/16/2006	FEIMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	8/15/2006	8/25/2006		Chugach Regional Educational Attendance Area	Valdez-Cordova	02261		0
1669	No	No	Yes	Yes	12/8/2006	FEIMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	10/8/2006	10/13/2006		Chugach Regional Educational Attendance Area	Valdez-Cordova	02261		0
1669	No	No	Yes	Yes	12/8/2006	FEIMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	10/8/2006	10/13/2006		Copper River Regional Educational Attendance Area	Valdez-Cordova	02261		0
1423	No	Yes	Yes	Yes	6/26/2002	FEIMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Crooked Creek (ANV/ANVSA)	Bethel	02050		0
1992	No	No	Yes	Yes	6/10/2011	FEIMA-DR	Flood	ICE JAM AND FLOODING	5/8/2011	5/13/2011		Crooked Creek (ANV/ANVSA)	Bethel	02050		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Denali (Borough)	Denali	02068		0
1663	No	No	Yes	Yes	10/16/2006	FEIMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	8/15/2006	8/25/2006		Denali (Borough)	Denali	02068		0
1796	No	No	Yes	Yes	9/26/2008	FEIMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	7/27/2008	8/6/2008		Denali (Borough)	Denali	02068		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Dillingham (Census Area)	Dillingham	02070		0
1423	No	Yes	Yes	Yes	6/26/2002	FEIMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Dillingham (Census Area)	Dillingham	02070		0
1316	No	No	Yes	Yes	2/17/2000	FEIMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Fairbanks North Star (Borough)	Fairbanks North Star	02090	025009	0
1423	No	Yes	Yes	Yes	6/26/2002	FEIMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Fairbanks North Star (Borough)	Fairbanks North Star	02090	025009	0
1796	No	No	Yes	Yes	9/26/2008	FEIMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	7/27/2008	8/6/2008		Fairbanks North Star (Borough)	Fairbanks North Star	02090	025009	0



(continued) Table 7: Alaska Disaster Declarations

Disaster Number	IH Program Declared	IA Program Declared	PA Program Declared	HM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
1571	No	No	Yes	Yes	11/15/2004	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	10/18/2004	10/24/2004	3/22/2011	Kashunmiut Regional Educational Attendance Area	Wade Hampton	02270		0
1618	No	No	Yes	Yes	12/9/2005	FEMA-DR	Severe Storm(s)	SEVERE FALL STORM, TIDAL SURGES, AND FLOODING	9/22/2005	9/26/2005		Kashunmiut Regional Educational Attendance Area	Wade Hampton	02270		0
782	No	Yes	Yes	Yes	10/27/1986	FEMA-DR	Flood	SEVERE STORMS & FLOODING	10/10/1986	10/13/1986	4/13/1995	Kenai Peninsula (Borough)	Kenai Peninsula	02122	020012	1
1072	No	No	Yes	Yes	10/13/1995	FEMA-DR	Flood	FLOODING	9/18/1995	10/10/1995	3/10/2006	Kenai Peninsula (Borough)	Kenai Peninsula	02122	020012	1
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Kenai Peninsula (Borough)	Kenai Peninsula	02122	020012	1
1445	Yes	Yes	Yes	Yes	12/4/2002	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND HIGH WINDS AND FREEZING	10/23/2002	12/20/2002		Kenai Peninsula (Borough)	Kenai Peninsula	02122	020012	1
1461	Yes	Yes	Yes	Yes	4/26/2003	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, INCLUDING HIGH WINDS AND FREEZING	3/6/2003	3/14/2003	8/12/2010	Kenai Peninsula (Borough)	Kenai Peninsula	02122	020012	1
1669	No	No	Yes	Yes	12/8/2006	FEMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	10/8/2006	10/13/2006		Kenai Peninsula (Borough)	Kenai Peninsula	02122	020012	1
1072	No	No	Yes	Yes	10/13/1995	FEMA-DR	Flood	FLOODING	9/18/1995	10/10/1995	3/10/2006	Kodiak Island (Borough)	Kenai Peninsula	02150		0
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Kodiak Island (Borough)	Kenai Peninsula	02150		0
1445	Yes	Yes	Yes	Yes	12/4/2002	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS, FLOODING, COASTAL EROSION AND	10/23/2002	12/20/2002		Kodiak Island (Borough)	Kenai Peninsula	02150		0
1865	No	No	Yes	Yes	12/18/2009	FEMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, MUDSLIDES, AND ROCKSLIDES	10/6/2009	10/11/2009		Kodiak Island (Borough)	Kenai Peninsula	02150		0
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Kuskokwim Regional Educational Attendance Area	Bethel	02050		0
1992	No	No	Yes	Yes	6/10/2011	FEMA-DR	Flood	ICE JAM AND FLOODING	5/8/2011	5/13/2011		Kuskokwim Regional Educational Attendance Area	Bethel	02050		0
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Lake and Peninsula (Borough)	Bethel	02164	020063	1
1423	No	Yes	Yes	Yes	6/26/2002	FEMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Lime Village (ANV/AN/SA)	Bethel	02050		0
1571	No	No	Yes	Yes	11/15/2004	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	10/18/2004	10/24/2004	3/22/2011	Lower Kuskokwim Regional Educational Attendance Area	Bethel	02050		0
1618	No	No	Yes	Yes	12/9/2005	FEMA-DR	Severe Storm(s)	SEVERE FALL STORM, TIDAL SURGES, AND FLOODING	9/22/2005	9/26/2005		Lower Kuskokwim Regional Educational Attendance Area	Bethel	02050		0
1657	No	No	Yes	Yes	8/4/2006	FEMA-DR	Flood	SNOW MELT AND ICE JAM FLOODING	5/13/2006	5/30/2006		Lower Kuskokwim Regional Educational Attendance Area	Bethel	02050		0
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Lower Kuskokwim Regional Educational Attendance Area	Bethel	02050		0
1571	No	No	Yes	Yes	11/15/2004	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	10/18/2004	10/24/2004	3/22/2011	Lower Yukon Regional Educational Attendance Area	Wade Hampton	02270		0
1657	No	No	Yes	Yes	8/4/2006	FEMA-DR	Flood	SNOW MELT AND ICE JAM FLOODING	5/13/2006	5/30/2006		Lower Yukon Regional Educational Attendance Area	Wade Hampton	02270		0
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Lower Yukon Regional Educational Attendance Area	Wade Hampton	02270		0
782	No	Yes	Yes	Yes	10/27/1986	FEMA-DR	Flood	SEVERE STORMS & FLOODING	10/10/1986	10/13/1986	4/13/1995	Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1
1072	No	No	Yes	Yes	10/13/1995	FEMA-DR	Flood	FLOODING	9/18/1995	10/10/1995	3/10/2006	Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1



(continued) Table 7: Alaska Disaster Declarations

Disaster Number	IH Program Declared	LA Program Declared	PA Program Declared	HM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
1423	No	Yes	Yes	Yes	6/26/2002	FEMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1
1461	Yes	Yes	Yes	Yes	4/26/2003	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, INCLUDING HIGH WINDS AND FREEZING	3/6/2003	3/14/2003	8/12/2010	Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1
1663	No	No	Yes	Yes	10/16/2006	FEMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	8/15/2006	8/25/2006		Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Matanuska-Susitna (Borough)	Matanuska-Susitna	02170	020021	1
1039	No	Yes	Yes	Yes	9/13/1994	FEMA-DR	Severe Storm(s)	SEVERE STORMS AND FLOODING	8/8/1994	9/15/1994	8/14/2002	Nondalton (ANY/ANY/SA)	Lake and Peninsula	02164	020070	0
781	No	No	Yes	Yes	10/27/1986	FEMA-DR	Flood	COASTAL STORM, HIGH WINDS & WAVES	9/20/1986	9/21/1986	4/4/1991	North Slope (Borough)	North Slope	02185		0
1584	No	No	Yes	Yes	3/14/2005	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM	1/7/2005	1/12/2005		North Slope (Borough)	North Slope	02185		0
1796	No	No	Yes	Yes	9/26/2008	FEMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	7/27/2008	8/6/2008		North Slope (Borough)	North Slope	02185		0
1039	No	Yes	Yes	Yes	9/13/1994	FEMA-DR	Severe Storm(s)	SEVERE STORMS AND FLOODING	8/8/1994	9/15/1994	8/14/2002	Northwest Arctic (Borough)	Northwest Arctic	02188	020121	1
1571	No	No	Yes	Yes	11/15/2004	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	10/18/2004	10/24/2004	3/22/2011	Northwest Arctic (Borough)	Northwest Arctic	02188	020121	1
1618	No	No	Yes	Yes	12/9/2005	FEMA-DR	Severe Storm(s)	SEVERE FALL STORM, TIDAL SURGES, AND FLOODING	9/22/2005	9/26/2005		Northwest Arctic (Borough)	Northwest Arctic	02188	020121	1
1571	No	No	Yes	Yes	11/15/2004	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORM, TIDAL SURGES AND FLOODING	10/18/2004	10/24/2004	3/22/2011	Pribilof Island Regional Educational Attendance Area	Aleutians West	02016		0
1423	No	Yes	Yes	Yes	6/26/2002	FEMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Red Devil (ANY/ANY/SA)	Belhel	02050		0
1992	No	No	Yes	Yes	6/10/2011	FEMA-DR	Flood	ICE JAM AND FLOODING	5/8/2011	5/13/2011		Red Devil (ANY/ANY/SA)	Belhel	02050		0
1423	No	Yes	Yes	Yes	6/26/2002	FEMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Sleetmute (ANY/ANY/SA)	Belhel	02050		0
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Southeast Fairbanks (Census Area)	Southeast Fairbanks	02240		0
230	No	Yes	Yes	Yes	8/17/1967	FEMA-DR	Flood	SEVERE STORMS & FLOODING	8/17/1967	8/17/1967	11/30/1973	Tanana (ANY/ANY/SA)	Yukon-Koyukuk	02290		0
281	No	Yes	Yes	Yes	12/19/1969	FEMA-DR	Severe Storm(s)	HEAVY RAINS & LANDSLIDE	12/19/1969	12/19/1969	8/16/1971	Tanana (ANY/ANY/SA)	Yukon-Koyukuk	02290		0
408	No	Yes	Yes	Yes	11/7/1973	FEMA-DR	Flood	HEAVY RAINS & FLOODING	11/7/1973	11/7/1973	8/11/1978	Tanana (ANY/ANY/SA)	Yukon-Koyukuk	02290		0
452	No	Yes	Yes	Yes	11/14/1974	FEMA-DR	Flood	SEVERE STORMS & FLOODING	11/14/1974	11/14/1974	8/18/1982	Tanana (ANY/ANY/SA)	Yukon-Koyukuk	02290		0
781	No	No	Yes	Yes	10/27/1986	FEMA-DR	Flood	COASTAL STORM, HIGH WINDS & WAVES	9/20/1986	9/21/1986	4/4/1991	Tanana (ANY/ANY/SA)	Yukon-Koyukuk	02290		0
782	No	Yes	Yes	Yes	10/27/1986	FEMA-DR	Flood	SEVERE STORMS & FLOODING	10/10/1986	10/13/1986	4/13/1995	Valdez-Cordova (Census Area)	Valdez-Cordova	02261		0
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Valdez-Cordova (Census Area)	Valdez-Cordova	02261		0
832	No	Yes	Yes	Yes	6/10/1989	FEMA-DR	Flood	FLOODING	5/1/1988	6/10/1989	3/18/1998	Wade Hampton (Census Area)	Valdez-Cordova	02261		0
1316	No	No	Yes	Yes	2/17/2000	FEMA-DR	Severe Storm(s)	SEVERE WINTER STORMS AND AVALANCHES	12/21/1999	2/23/2000	4/26/2010	Wade Hampton (Census Area)	Valdez-Cordova	02261		0
1423	No	Yes	Yes	Yes	6/26/2002	FEMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Wade Hampton (Census Area)	Valdez-Cordova	02261		0



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 7: Alaska Disaster Declarations

Disaster Number	HI Program Declared	IA Program Declared	PA Program Declared	HIM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Yukon Flats Regional Educational Attendance Area	Yukon-Koyukuk	02290		0
1657	No	No	Yes	Yes	8/4/2006	FEMA-DR	Flood	SNOW MELT AND ICE JAM FLOODING	5/13/2006	5/30/2006		Yukon Koyukuk Regional Educational Attendance Area	Yukon-Koyukuk	02290		0
1796	No	No	Yes	Yes	9/26/2008	FEMA-DR	Severe Storm(s)	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	7/27/2008	8/6/2008		Yukon Koyukuk Regional Educational Attendance Area	Yukon-Koyukuk	02290		0
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Yukon Koyukuk Regional Educational Attendance Area	Yukon-Koyukuk	02290		0
782	No	Yes	Yes	Yes	10/27/1986	FEMA-DR	Flood	SEVERE STORMS & FLOODING	10/10/1986	10/13/1986	4/13/1995	Yukon-Koyukuk (Census Area)	Yukon-Koyukuk	02290		0
832	No	Yes	Yes	Yes	6/10/1989	FEMA-DR	Flood	FLOODING	5/1/1989	6/10/1989	3/18/1998	Yukon-Koyukuk (Census Area)	Yukon-Koyukuk	02290		0
1039	No	Yes	Yes	Yes	9/13/1994	FEMA-DR	Severe Storm(s)	SEVERE STORMS AND FLOODING	8/8/1994	9/15/1994	8/14/2002	Yukon-Koyukuk (Census Area)	Yukon-Koyukuk	02290		0
1423	No	Yes	Yes	Yes	6/26/2002	FEMA-DR	Flood	FLOODING	4/27/2002	5/30/2002	5/26/2010	Yukon-Koyukuk (Census Area)	Yukon-Koyukuk	02290		0
1843	Yes	No	Yes	Yes	6/11/2009	FEMA-DR	Flood	FLOODING AND ICE JAMS	4/28/2009	5/31/2009		Yupit Regional Educational Attendance Area	Bethel	02050		0
AK-1					12/1/1978		Severe Storm(s)	The Village of Karluk				The Village of Karluk	Kodiak Island	02150		0
AK-2					2/10/1978		Flood	Campbell Creek (Anchorage)				Campbell Creek (Anchorage)	Anchorage	02020	020005	1
AK-3					11/6/1978		Severe Storm(s)	Wrangell/Craig				Wrangell/Craig	Wrangell-Petersburg	02280	020098	1
AK-6					11/23/1979		Severe Storm(s)	West Coast Storm				West Coast Storm	Dillingham	02070	020090	1
AK-7					12/20/1979		Flood	Willow Creek				Willow Creek	Matanuska-Susitna	02170	020021	1
AK-8					2/5/1980		Severe Storm(s)	Kodiak Island				Kodiak Island	Kodiak Island	02150		0
AK-9					4/4/1980		Severe Storm(s)	Anchorage Windstorm				Anchorage Windstorm	Anchorage	02020	020005	1
AK-9					4/4/1980		Severe Storm(s)	Anchorage Windstorm				Anchorage Windstorm	Matanuska-Susitna	02170	020021	1
AK-10					9/2/1980		Severe Storm(s)	Bristol Bay				Bristol Bay	Dillingham	02070	020041	1
AK-11					12/11/1980		Flood	Copper Center				Copper Center	Valdez-Cordova	02261		0
AK-13					7/22/1981		Flood	Southcentral Alaska Rainstorm				Southcentral Alaska Rainstorm	#N/A			0
AK-15					5/17/1982		Flood	Fort Yukon				Fort Yukon	Yukon-Koyukuk	02290	020045	1
AK-16					10/1/1982		Severe Storm(s)	Russian Mission, Akiak, Akiachak				Russian Mission, Akiak, Akiachak	Wade Hampton	02270		0
AK-16					10/1/1982		Severe Storm(s)	Russian Mission, Akiak, Akiachak				Russian Mission, Akiak, Akiachak	Bethel	02050		0
AK-18					4/1/1983		Flood	Kipnuk				Kipnuk	Bethel	02050		0
AK-19					6/15/1983		Flood	Aniak				Aniak	Bethel	02050	020033	1
AK-21					9/16/1983		Flood	Cordova				Cordova	Valdez-Cordova	02261	020037	1
AK-26					4/30/1984		Flood	Kotzebue				Kotzebue	Northwest Arctic	02188	020059	1
AK-28					6/13/1984		Flood	Alakanuk				Alakanuk	Wade Hampton	02270		0
AK-29					6/15/1984		Flood	Emmonak				Emmonak	Wade Hampton	02270	020125	1
AK-32					11/26/1984		Severe Storm(s)	Southeast Alaska				Southeast Alaska	Juneau	02110	020009	1



(continued) Table 7: Alaska Disaster Declarations

Disaster Number	IH Program Declared	IA Program Declared	PA Program Declared	HM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
AK-32					11/26/1984		Severe Storm(s)	Southeast Alaska				Southeast Alaska	Sitka	02220	020006	1
AK-33					1/25/1985		Flood	Haines				Haines	Haines	02100	020007	1
AK-36					5/30/1985		Flood	Buckland				Buckland	Northwest Arctic	02188		0
AK-37					5/30/1985		Flood	Kobuk				Kobuk	Northwest Arctic	02188		0
AK-38					6/5/1985		Flood	Anvik				Anvik	Yukon-Koyukuk	02290		0
AK-39					6/11/1985		Flood	Emmonak				Emmonak	Wade Hampton	02270	020125	1
AK-40					6/18/1985		Flood	Pilot Station				Pilot Station	Wade Hampton	02270		0
AK-41					6/18/1985		Flood	Upper Kuskokwim River				Upper Kuskokwim River	Yukon-Koyukuk	02290	020128	1
AK-42					7/9/1985		Flood	Pitka's Point				Pitka's Point	Wade Hampton	02270		0
AK-43					7/10/1985		Flood	Bethel				Bethel	Bethel	02050	020104	1
AK-45					10/31/1985		Flood	Cordova				Cordova	Valdez-Cordova	02261	020037	1
AK-49					12/13/1985		Severe Storm(s)	Unalaska				Unalaska	Aleutians West	02016	020093	0
AK-52					3/19/1986		Severe Storm(s)	Pelican				Pelican	Skagway-Hoonah	02232	020073	0
AK-55					9/25/1986		Severe Storm(s)	Arctic (North Slope Major Disaster)				Arctic (North Slope Major Disaster)	North Slope	02185	020024	0
AK-56					10/12/1986		Flood	Southcentral Alaska Flood (Major)				Southcentral Alaska Flood (Major Disaster)	Kenai Peninsula	02122	020113	1
AK-56					10/12/1986		Flood	Southcentral Alaska Flood (Major)				Southcentral Alaska Flood (Major Disaster)	Valdez-Cordova	02261	020037	1
AK-56					10/12/1986		Flood	Southcentral Alaska Flood (Major)				Southcentral Alaska Flood (Major Disaster)	Matanuska-Susitna	02170	020021	1
AK-60					5/28/1987		Flood	Sleetmute/Red Devil				Sleetmute/Red Devil	Bethel	02050		0
AK-62					5/29/1987		Flood	Aniak				Aniak	Bethel	02050	020033	1
AK-63					6/16/1987		Flood	Buckland				Buckland	Northwest Arctic	02188		0
AK-64					7/24/1987		Flood	Richardson Highway				Richardson Highway	#N/A			0
AK-70					2/29/1988		Flood	Haines				Haines	Haines	02100	020007	1
AK-76					5/12/1988		Flood	Crooked Creek				Crooked Creek	#N/A			0
AK-77					5/24/1988		Flood	Napakia/Napaskiak				Napakia/Napaskiak	Bethel	02050		0
AK-78					5/26/1988		Flood	Kaltag				Kaltag	Yukon-Koyukuk	02290		0
AK-80					8/5/1988		Severe Storm(s)	Shishmaref				Shishmaref	None	02180	020084	1
AK-85					2/9/1989		Severe Storm(s)	St. George				St. George	Aleutians West	02016		0
AK-88					3/8/1989		Severe Storm(s)	North Slope Borough				North Slope Borough	North Slope	02185		0
AK-92					5/6/1989		Flood	Circle				Circle	Yukon-Koyukuk	02290		0
AK-93					5/6/1989		Flood	Ft. Yukon				Ft. Yukon	Yukon-Koyukuk	02290		0
AK-94					6/10/1989		Flood	Spring Floods				Spring Floods	Yukon-Koyukuk	02290		0
AK-95					6/19/1989		Flood	Klawock				Klawock	Prince of Wales-Outer	02201		0
AK-96					8/1/1989		Flood	Fairbanks/North Star Borough				Fairbanks/North Star Borough	Fairbanks North Star	02090	025009	1



(continued) Table 7: Alaska Disaster Declarations

Disaster Number	IH Program Declared	IA Program Declared	PA Program Declared	HM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
AK-97					8/4/1989		Flood	Mat-Su Borough				Mat-Su Borough	Matanuska-Susitna	02170	020021	1
AK-99					8/30/1989		Flood	Municipality of Anchorage				Municipality of Anchorage	Anchorage	02020	020005	1
AK-100					8/30/1989		Flood	Seward/Kenai Peninsula Borough				Seward/Kenai Peninsula Borough	Kenai Peninsula	02122	020113	1
AK-100					8/30/1989		Flood	Seward/Kenai Peninsula Borough				Seward/Kenai Peninsula Borough	Kenai Peninsula	02122	020012	1
AK-101					9/13/1989		Flood	Richardson Highway				Richardson Highway	#N/A			0
AK-111					4/14/1990		Flood	'89 Spring Floods Hazard Mitigation				'89 Spring Floods Hazard Mitigation	#N/A			0
AK-112					6/12/1905		Severe Storm(s)	Snow & Ice Removal				Snow & Ice Removal	#N/A			0
AK-113					5/16/1990		Flood	McGrath				McGrath	Yukon-Koyukuk	02290	020128	1
AK-114					5/17/1990		Flood	Kobuk				Kobuk	Northwest Arctic	02188		0
AK-120					9/4/1990		Severe Storm(s)	Lower Kuskokwim				Lower Kuskokwim	Bristol Bay	02060		0
AK-121					9/4/1990		Severe Storm(s)	Ktzebue				Kotzebue	Northwest Arctic	02188	020059	1
AK-122					9/10/1990		Severe Storm(s)	Nome				Nome	Nome	02180	020069	1
AK-123					9/10/1990		Severe Storm(s)	Teller				Teller	Nome	02180		0
AK-125					11/21/1990		Severe Storm(s)	Diomed				Diomed	Nome	02180		0
AK-132					5/3/1991		Flood	Fairbanks/North Star Borough May 3,				Fairbanks/North Star Borough	Fairbanks North Star	02090	025009	1
AK-133					5/3/1991		Flood	Aniak				Aniak	Bethel	02050	020033	1
AK-134					5/3/1991		Flood	McGrath				McGrath	Yukon-Koyukuk	02290	020128	1
AK-135					5/3/1991		Flood	Red Devil				Red Devil	Bethel	02050		0
AK-136					5/3/1991		Flood	Anvik				Anvik	Yukon-Koyukuk	02290		0
AK-137					5/3/1991		Flood	Grayling				Grayling	Yukon-Koyukuk	02290		0
AK-138					5/3/1991		Flood	Emmonak				Emmonak	Wade Hampton	02270	020125	1
AK-139					5/3/1991		Flood	Holy Cross				Holy Cross	Yukon-Koyukuk	02290		0
AK-140					5/3/1991		Flood	Alakanuk				Alakanuk	Wade Hampton	02270		0
AK-141					5/3/1991		Flood	Shageluk				Shageluk	Yukon-Koyukuk	02290		0
AK-142					5/3/1991		Flood	Galena				Galena	Yukon-Koyukuk	02290	020124	1
AK-149					10/14/1991		Flood	New Koliganek				New Koliganek	#N/A	#N/A		0
AK-153					5/19/1992		Flood	Eagle City				Eagle City	Southeast Fairbanks	02240		0
AK-154					5/19/1992		Flood	Eagle Village				Eagle Village	Southeast Fairbanks	02240		0
AK-155					6/4/1992		Flood	Galena-92 Flood				Galena-92 Flood	Yukon-Koyukuk	02290	020124	1
AK-156					6/9/1992		Flood	Flood Response				Flood Response	Yukon-Koyukuk	02290		0
AK-157					6/17/1992		Flood	Yukon River Flood				Yukon River Flood	Yukon-Koyukuk	02290	020045	1
AK-160					8/14/1992		Flood	Haines Highway Disaster				Haines Highway Disaster	Haines	02100	020007	1
AK-162					10/5/1992		Severe Storm(s)	Nome Highway Disaster				Nome Highway Disaster	Nome	02180	020069	1



(continued) Table 7: Alaska Disaster Declarations

Disaster Number	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
AK-168		Flood	Hazard Mitigation AK-0909				Hazard Mitigation AK-0909	Yukon-Koyukuk	02290		0
AK-170		Flood	Galena Disaster	5/10/1994			Galena Disaster	Yukon-Koyukuk	02290	020124	1
AK-171		Flood	Cummings Road Flood	7/13/1994			Cummings Road Flood	#N/A	#N/A		0
AK-173		Flood	94 Fall Flood	8/26/1994			94 Fall Flood	Northwest Arctic	02188	020059	1
AK-174		Severe Storm(s)	Metlakatla Sea Storm	11/10/1994			Metlakatla Sea Storm	Prince of Wales-Outer	02201		0
AK-176		Flood	Yukon Kuskokwim Delta	6/5/1995			Yukon Kuskokwim Delta	Bethel	02050	020130	1
AK-176		Flood	Yukon Kuskokwim Delta	6/5/1995			Yukon Kuskokwim Delta	Wade Hampton	02270	020125	1
AK-177		Flood	Aniak Ice Jam Flood	6/5/1995			Aniak Ice Jam Flood	Bethel	02050	020033	1
AK-96-		Flood	South-central Fall Floods	9/21/1995			South-central Fall Floods	Valdez-Cordova	02261	020037	1
AK-96-		Flood	South-central Fall Floods	9/21/1995			South-central Fall Floods	Anchorage	02020	020005	1
AK-96-		Flood	South-central Fall Floods	9/21/1995			South-central Fall Floods	Kenai Peninsula	02122	020012	1
AK-96-		Flood	South-central Fall Floods	9/21/1995			South-central Fall Floods	Matanuska-Susitna	02170	020170	1
AK-97-		Severe Storm(s)	96 Southeast Storm (Pelican/Elfin	11/13/1997			96 Southeast Storm (Pelican/Elfin	Skagway-Hoonah-	02232		0
AK-98-		Flood	Eastern Tanana River	8/26/1997			Eastern Tanana River	Southeast Fairbanks	02240		0
AK-98-		Severe Storm(s)	Shishmaref Sea Storm	10/6/1997			Shishmaref Sea Storm	Nome	02180	020084	1
AK-98-		Flood	Endicott Mountains Flood 6/18/98	6/18/1998			Endicott Mountains Flood 6/18/98	Yukon-Koyukuk	02290		0
AK-98-		Severe Storm(s)	Southeastern Storm	10/27/1998			Southeastern Storm	Juneau	02110	020009	1
AK-98-		Severe Storm(s)	Southeastern Storm	10/27/1998			Southeastern Storm	Haines	02100	020007	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Valdez-Cordova	02261	020094	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Dillingham	02070	020041	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Bethel	02050	020104	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Anchorage	02020	020005	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Lake and Peninsula	02164	025063	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Matanuska-Susitna	02170	020021	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Kenai Peninsula	02122	020012	1
AK-00-		Severe Storm(s)	Central Gulf Coast Storm	2/4/2000			Central Gulf Coast Storm	Fairbanks North Star	02090	025009	1
AK-01-		Flood	Middle Yukon Flood	5/31/2001			Middle Yukon Flood	Yukon-Koyukuk	02290	020127	1
AK-01-		Flood	Middle Yukon Flood	5/31/2001			Middle Yukon Flood	Yukon-Koyukuk	02290	020124	1
AK-02-		Severe Storm(s)	Shishmaref Seawall (Admin Order	10/27/2001			Shishmaref Seawall (Admin Order 194)	Nome	02180	020084	1
AK-02-		Flood	02 Interior Floods (AK-DR-1423)	5/29/2002			02 Interior Floods (AK-DR-1423)	Yukon-Koyukuk	02290	020128	1
AK-02-		Flood	02 Interior Floods (AK-DR-1423)	5/29/2002			02 Interior Floods (AK-DR-1423)	Bethel	02050	020130	1
AK-02-		Flood	02 Interior Floods (AK-DR-1423)	5/29/2002			02 Interior Floods (AK-DR-1423)	Wade Hampton	02270	020125	1
AK-02-		Flood	02 Interior Floods (AK-DR-1423)	5/29/2002			02 Interior Floods (AK-DR-1423)	Fairbanks North Star	02090	025009	1



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(continued) Table 7: Alaska Disaster Declarations

Disaster Number	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
AK-02		Flood	02 Interior Floods (AK-DR-1423)				02 Interior Floods (AK-DR-1423)	Matanuska-Susitna	02170	020021	1
AK-03		Severe Storm(s)	Northwest Fall Sea Storm				Northwest Fall Sea Storm	Nome	02180	020084	1
AK-03		Severe Storm(s)	Northwest Fall Sea Storm				Northwest Fall Sea Storm	Northwest Arctic	02188	020059	1
AK-03		Flood	Kenai Peninsula Borough Flooding (AK-DR-1461)				Kenai Peninsula Borough Flooding (AK-DR-1461)	Kenai Peninsula	02122	020012	1
AK-03		Severe Storm(s)	Southcentral Windstorm (AK-DR-1461)				Southcentral Windstorm (AK-DR-1461)	Anchorage	02020	020005	1
AK-03		Severe Storm(s)	Southcentral Windstorm (AK-DR-1461)				Southcentral Windstorm (AK-DR-1461)	Kenai Peninsula	02122	020012	1
AK-03		Severe Storm(s)	Southcentral Windstorm (AK-DR-1461)				Southcentral Windstorm (AK-DR-1461)	Matanuska-Susitna	02170	020021	1
AK-03		Flood	Salcha Flood 2003 State Disaster (AK-03-2006)				Salcha Flood 2003 State Disaster (AK-03-2006)	Fairbanks North Star	02090	025009	1
AK-04		Flood	03 July Riverine Flooding (AK-04-206)				03 July Riverine Flooding (AK-04-206)	Denali	02068		0
AK-04		Flood	03 Fall Flood (AK-04-207)				03 Fall Flood (AK-04-207)	Lake and Peninsula	02164	025063	1
AK-04		Flood	03 Fall Flood (AK-04-207)				03 Fall Flood (AK-04-207)	Kenai Peninsula	02122	020012	1
AK-04		Severe Storm(s)	03 Fall Sea Storm (AK-04-209)				03 Fall Sea Storm (AK-04-209)	Nome	02180	020069	1
AK-05		Severe Storm(s)	2004 Bering Strait Sea Storm				2004 Bering Strait Sea Storm	Nome	02180	020069	1
AK-05		Severe Storm(s)	2004 Bering Strait Sea Storm				2004 Bering Strait Sea Storm	Northwest Arctic	02188	020059	1
AK-05		Severe Storm(s)	2005 Kaktovik Winter Storm				2005 Kaktovik Winter Storm	North Slope	02185		0
AK-05		Flood	2005 Spring Floods (AK-05-213)				2005 Spring Floods (AK-05-213)	Yukon-Koyukuk	02290	020128	1
AK-05		Flood	2005 Spring Floods (AK-05-213)				2005 Spring Floods (AK-05-213)	Wade Hampton	02270	020125	1
AK-06		Severe Storm(s)	2005 Bristol Bay Storm (AK-06-214)				2005 Bristol Bay Storm (AK-06-214)	Dillingham	02070	020041	1
AK-06		Severe Storm(s)	2005 Bristol Bay Storm (AK-06-214)				2005 Bristol Bay Storm (AK-06-214)	Dillingham	02070	020090	1
AK-06		Severe Storm(s)	2005 Bristol Bay Storm (AK-06-214)				2005 Bristol Bay Storm (AK-06-214)	Lake and Peninsula	02164	025063	1
AK-06		Severe Storm(s)	2005 West Coast Storm				2005 West Coast Storm	Nome	02180	020069	1
AK-06		Severe Storm(s)	2005 West Coast Storm				2005 West Coast Storm	Northwest Arctic	02188	020121	1
AK-06		Severe Storm(s)	2005 Southeast Storm (AK-06-216)				2005 Southeast Storm (AK-06-216)	Skagway-Hoonah	02232	020049	1
AK-06		Severe Storm(s)	2005 Southeast Storm (AK-06-216)				2005 Southeast Storm (AK-06-216)	Juneau	02110	020009	1
AK-06		Severe Storm(s)	2005 Southeast Storm (AK-06-216)				2005 Southeast Storm (AK-06-216)	Haines	02100	020007	1
AK-06		Severe Storm(s)	2005 Southeast Storm (AK-06-216)				2005 Southeast Storm (AK-06-216)	Sitka	02220	020006	1
AK-06		Severe Storm(s)	2006 South Central Storm (AK-06-217)				2006 South Central Storm (AK-06-217)	Kenai Peninsula	02122	020113	1
AK-06		Severe Storm(s)	2006 South Central Storm (AK-06-217)				2006 South Central Storm (AK-06-217)	Kenai Peninsula	02122	020012	1
AK-06		Flood	2006 Spring Floods (AK-06-218)				2006 Spring Floods (AK-06-218)	Bethel	02050	020130	1
AK-06		Flood	2006 Spring Floods (AK-06-218)				2006 Spring Floods (AK-06-218)	Yukon-Koyukuk	02290	020127	1
AK-06		Flood	2006 Spring Floods (AK-06-218)				2006 Spring Floods (AK-06-218)	Wade Hampton	02270	020125	1
AK-07		Flood	2006 August Southcentral Flooding (AK-07-2006)				2006 August Southcentral Flooding (AK-07-2006)	Valdez-Cordova	02261	020037	1
AK-07		Flood	2006 August Southcentral Flooding (AK-07-2006)				2006 August Southcentral Flooding (AK-07-2006)	Matanuska-Susitna	02170	020021	1



(continued) Table 7: Alaska Disaster Declarations

Disaster Number	IH Program Declared	IA Program Declared	PA Program Declared	HM Program Declared	Declaration Date	Disaster Type	Incident Type	TITLE	Incident Begin Date	Incident End Date	Disaster Close Out Date	Declared Area	FEMA Borough	FIPS	CID	NFIP
AK-07-					10/14/2006		Severe Storm(s)	2006 October Southern Alaska Storm				2006 October Southern Alaska Storm (AK-	Valdez-Cordova	02261	020094	1
AK-07-					10/14/2006		Severe Storm(s)	2006 October Southern Alaska Storm				2006 October Southern Alaska Storm (AK-	Kenai Peninsula	02122	020113	1
AK-07-					10/14/2006		Severe Storm(s)	2006 October Southern Alaska Storm				2006 October Southern Alaska Storm (AK-	Valdez-Cordova	02261	020037	1
AK-07-					10/14/2006		Severe Storm(s)	2006 October Southern Alaska Storm				2006 October Southern Alaska Storm (AK-	Kenai Peninsula	02122	020012	1
AK-07-					11/19/2006		Severe Storm(s)	2006 October Kivalina Storm,				2006 October Kivalina Storm,	Northwest Arctic	02188	020121	1
AK-07-					3/2/2007		Flood	2007 January Kenai Ice Jam Flood, AK-				2007 January Kenai Ice Jam Flood, AK-07-	Kenai Peninsula	02122	020014	1
AK-07-					3/2/2007		Flood	2007 January Kenai Ice Jam Flood, AK-				2007 January Kenai Ice Jam Flood, AK-07-	Kenai Peninsula	02122	020012	1
AK-08-					1/22/2008		Severe Storm(s)	2007 Kivalina Storm Admin Order #				2007 Kivalina Storm Admin Order # 239	Nome	02180	020084	1
AK-08-					1/22/2008		Severe Storm(s)	2007 Kivalina Storm Admin Order #				2007 Kivalina Storm Admin Order # 239	Northwest Arctic	02188	020121	1
AK-09-					8/4/2008		Flood	2008 Tanana Basin Flooding (AK-09-				2008 Tanana Basin Flooding (AK-09-226)	Yukon-Koyukuk	02290	025010	1
AK-09-					8/4/2008		Flood	2008 Tanana Basin Flooding (AK-09-				2008 Tanana Basin Flooding (AK-09-226)	Yukon-Koyukuk	02290	020127	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Nome	02180	020069	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Yukon-Koyukuk	02290	020128	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Bethel	02050	020130	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Yukon-Koyukuk	02290	020127	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Yukon-Koyukuk	02290	020045	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Yukon-Koyukuk	02290	020124	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Wade Hampton	02270	020125	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Bethel	02050	020104	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Northwest Arctic	02188	020121	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Bethel	02050	020033	1
AK-09-					5/6/2009		Flood	2009 Spring Flood				2009 Spring Flood	Matanuska-Susitna	02170	020021	1
AK-09-					9/29/2009		Flood	Pelican Admin Order (AO # 259)				Pelican Admin Order (AO # 259)	Skagway-Hoonah-	02232	020073	0
AK-09-					11/5/2009		Severe Storm(s)	2009 October Kodiak Storms				2009 October Kodiak Storms	Kodiak Island	02150		0
AK-09-					12/31/2009		Severe Storm(s)	2009 Seward Storm Surge				2009 Seward Storm Surge	Kenai Peninsula	02122	020113	1
AK-10-					7/26/2010		Flood	2010 July Interior Flooding				2010 July Interior Flooding	Yukon-Koyukuk	02290		0
AK-11-					1/14/2011		Severe Storm(s)	2010 Savoonga Power Outage				2010 Savoonga Power Outage	Nome	02180		0



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Table 8: Letters of Map Change
**Used for 2011 Alaska Risk MAP Prioritization Algorithm*

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
07-10-0261A	AK	Anchorage	ANCHORAGE, CITY OF				Suspended
93-4X-0102	AK	Anchorage	ANCHORAGE, CITY OF				Completed
93-RX-0005	AK	Anchorage	ANCHORAGE, CITY OF				Completed
93-RX-0031	AK	Anchorage	ANCHORAGE, CITY OF				Completed
93-RX-0090	AK	Anchorage	ANCHORAGE, CITY OF				Completed
93-RX-0096	AK	Anchorage	ANCHORAGE, CITY OF				Completed
94-RX-0031	AK	Anchorage	ANCHORAGE, CITY OF				Closed
94-RX-0124	AK	Anchorage	ANCHORAGE, CITY OF				Completed
94-RX-0157	AK	Anchorage	ANCHORAGE, CITY OF				Completed
94-RX-0182	AK	Anchorage	ANCHORAGE, CITY OF				Completed
94-RX-0192	AK	Anchorage	ANCHORAGE, CITY OF				Completed
94-RX-0207	AK	Anchorage	ANCHORAGE, CITY OF				Completed
94-RX-0219	AK	Anchorage	ANCHORAGE, CITY OF				Completed
95-R10-002	AK	Anchorage	ANCHORAGE, CITY OF				Completed
95-R10-221	AK	Anchorage	ANCHORAGE, CITY OF				Completed
00-10-030A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
00-10-054A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
00-10-383A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
00-10-506A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	LOWER FIRE LAKE			Completed
01-10-037A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
01-10-106A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
01-10-155A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
02-10-342A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
02-10-445A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
02-10-509A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CALIFORNIA CREEK			Closed
02-10-569A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	LITTLE CAMPBELL CREEK			Completed
03-10-0030A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	DELONG LAKE			Completed
03-10-0036A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	MIDDLE BR. OF S.FK. CHESTER CK			Completed
03-10-0038A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CALIFORNIA CREEK			Completed
03-10-0046A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	S.BR OF N.FK LITTLE CAMPBELL C			Completed
03-10-0211A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	GLACIER CREEK			Completed
03-10-0385A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
03-10-0473A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	S. FORK LITTLE CAMPBELL CREEK			Completed
03-10-0579A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	GLACIER CREEK			Completed
03-10-0594A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
03-10-0697A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	DELONG LAKE			Completed
03-10-0713A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK LITTLE CAMPBELL CRK			Completed
03-10-0841A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	LOWER FIRE LAKE			Completed
03-10-0842A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK LITTLE CAMPBELL CRK			Completed
03-10-0843A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	DELONG LAKE			Completed
04-10-0125A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK LITTLE CAMPBELL CK			Completed
04-10-0187A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	S BR N FORK LITTLE CAMPBELL CK			Completed
04-10-0331A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	GLACIER CREEK			Completed
04-10-0332A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK CAMPBELL CREEK			Completed
04-10-0377A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
04-10-0454A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	S.BR. N. FORK LITTLE CAMPBELL			Completed
04-10-0468A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	REFLECTION LAKE			Completed
04-10-0724A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	S.BR. N. FORK LITTLE CAMPBELL			Completed
04-10-0832A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK LITTLE CAMPBELL CK			Completed
05-10-0011A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
05-10-0061A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK LITTLE CAMPBELL CK			Completed
05-10-0092A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
05-10-0227A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SHALLOW FLOODING			Completed
05-10-0269A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	REFLECTION LAKE			Completed
05-10-0321A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FIRE CREEK			Completed
05-10-0365A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
05-10-0391A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	N. BR. N. FK. LITTLE CAMPBELL			Completed
05-10-0402C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
05-10-0409A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK CAMPBELL CREEK			Completed
05-10-0736A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	REFLECTION LAKE			Completed
05-10-0822A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	N BR OF N FK LITTLE CAMPBELL			Completed
05-10-0836C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
05-10-0864A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
06-10-0168A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	DELONG LAKE			Completed
06-10-B137A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	glacier creek	60.964	-149.1	Completed
06-10-B214A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Ponding	61.147	-150	Completed
06-10-B216A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Branch of North Fork Little Campbe	61.158	-149.8	Completed
06-10-B388A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Campbel Lake	61.133	-149.9	Completed
06-10-B388A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Campbell Creek	61.133	-149.9	Completed
06-10-B423A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	North Fork Little Campbell Creek	61.16	-148.9	Completed
06-10-B426A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Branch of North Fork Little Campbe	61.158	-149.8	Completed
07-10-0175A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Glacier Creek	60.964	-149.1	Completed
07-10-0178A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	California Creek	60.903	-149	Completed



(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
07-10-0208C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	North Fork Little Campbell Creek	61.158	-149.9	Completed
07-10-0240A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	HOOD LAKE	61.181	-150	Completed
07-10-0462A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
07-10-0573A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Fork Little Campbell Creek	61.152	-149.9	Completed
07-10-0720A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.186	-149.8	Completed
08-10-0119A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
08-10-0367A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	North Fork Little Campbell River	61.16	-149.9	Completed
08-10-0373A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
08-10-0389A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Fish Creek	61.184	-149.8	Suspended
08-10-0569A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
08-10-0579A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
08-10-0609A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Alyeska Creek	60.964	-149.1	Completed
08-10-0783A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Turnagain Arm	61.12	-149.9	Completed
09-10-0079A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Chester Creek	61.208	-149.9	Completed
09-10-0445A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
09-10-1039A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Fire Creek	61.349	-149.5	Completed
09-10-1039A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Lower Fire Lake	61.349	-149.5	Completed
10-10-0004A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	North Fork Little Campbell Creek	61.158	-149.9	Completed
10-10-0256A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Suspended
10-10-0313A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	SOUTH FORK LITTLE CAMPBELL CREEK	61.148	-149.9	Completed
10-10-0328A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	North Fork Little Campbell Creek	61.161	-149.8	Completed
10-10-0378A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
10-10-0381A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Branch of North Fork Little Campbe	61.15	-149.8	Completed
10-10-0548A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Chester Creek	61.208	-149.9	Completed
10-10-0549A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Jones Lake	61.194	-150	Completed
10-10-0562A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Chester Creek	61.208	-149.9	Completed
10-10-0565A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-0595A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
10-10-0595A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Unnamed Creek	61.187	-149.8	Completed
10-10-0748A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Campbell Creek	61.145	-149.9	Completed
10-10-0804A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-0816A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.185	-149.8	Completed
10-10-0846A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
10-10-0885A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	GLACIER CREEK	60.692	-149.1	Completed
10-10-0907A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Goose Lake	61.194	-149.8	Completed
10-10-1010A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-1028A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Hood Creek	61.194	-150	Completed
10-10-1028A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE	61.194	-150	Completed
10-10-1085A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-1106A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Branch of North Fork Little Campbe	61.149	-149.8	Completed
10-10-1110A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
10-10-1110A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Unnamed Creek	61.187	-149.8	Completed
10-10-1134A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	DELONG LAKE	61.161	-150	Completed
10-10-1136A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.187	-149.8	Completed
10-10-1136A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Unnamed Creek	61.187	-149.8	Completed
10-10-1137A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-1138A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-1139A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-1140A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Suspended
10-10-1142A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Fish Creek	61.184	-149.8	Completed
11-10-0074A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Fork Chester Creek	61.202	-149.8	Completed
11-10-0119A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Hood Creek	61.195	-150	Completed
11-10-0119A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Jones Lake	61.195	-150	Completed
11-10-0600A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Fork Little Campbell Creek	61.142	-149.8	Completed
11-10-0601A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK	61.208	-149.9	Completed
11-10-0788A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Branch of North Fork Little Campbe	61.15	-149.8	Completed
11-10-1007A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Unnamed Flooding Source	61.146	-149.9	Suspended
11-10-1103A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Campbell Lake	61.136	-149.9	Completed
11-10-1104A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	North Branch of North Fork Little Campbe	61.162	-149.8	Completed
11-10-1153A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Lower Fire Lake	61.357	-149.5	Completed
11-10-1154A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Campbell Creek	61.145	-149.9	Completed
11-10-1157A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Campbell Creek	61.143	-149.9	Suspended
11-10-1165A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Chester Creek	61.208	-149.9	Completed
11-10-1165A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Westchester Lagoon	61.208	-149.9	Completed
11-10-1166A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Reflection Lake	61.188	-149.8	Completed
11-10-1166A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Unnamed Creek	61.188	-149.8	Completed
11-10-1167A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Fork Little Campbell Creek	61.14	-149.8	Completed
11-10-1303C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	California Creek			Suspended
11-10-1303C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Glacier Creek			Suspended
11-10-1369A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Fork Little Campbell Creek	61.139	-149.8	Completed
11-10-1911C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	California Creek			Inactive
11-10-1911C	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	Glacier Creek			Inactive
11-10-2020A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Branch of North Fork Little Campbe	61.151	-149.8	Completed



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
12-10-0032A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	South Fork Chester Creek	61.19	-149.8	Completed
12-10-0225A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Active
12-10-0295A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Active
12-10-0309A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Active
12-10-0310A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Active
12-10-0311A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Active
199107213FIA	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Completed
92-10-0018	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
92-10-0058	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Completed
92-10-007B	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
92-10-008B	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Completed
92-10-010B	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CAMPBELL LAKE			Completed
94-10-006A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Completed
95-10-021A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	GLACIER CREEK			Completed
95-R10-063	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Completed
95-R10-075	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF				Completed
96-10-043A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	FISH CREEK			Completed
97-10-070A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
97-10-093A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
97-10-106A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
97-10-191A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	S. FRK LITTLE CAMPBELL CREEK			Completed
97-10-295A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
98-10-213A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
98-10-231A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	JONES LAKE			Completed
98-10-351A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CAMPBELL CREEK			Completed
98-10-414A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CHESTER CREEK			Completed
99-10-051A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	REFLECTION LAKE			Completed
99-10-460A	AK	Anchorage	ANCHORAGE, MUNICIPALITY OF	CAMPBELL CREEK			Completed
04-10-0058A	AK	Bethel	BETHEL, CITY OF	BROWNS SLOUGH			Completed
06-10-8369A	AK	Bethel	BETHEL, CITY OF		32.258	-121.4	Suspended
11-10-1550A	AK	Bethel	BETHEL, CITY OF	Kuskokwim River	60.787	-161.8	Completed
97-10-223A	AK	Bethel	BETHEL, CITY OF	BROWNS SLOUGH			Completed
97-10-286A	AK	Bethel	BETHEL, CITY OF	BROWNS SLOUGH			Completed
01-10-024A	AK	Valdez-Cordova	CORDOVA, CITY OF	ORCA INLET			Completed
01-10-564A	AK	Valdez-Cordova	CORDOVA, CITY OF	ORCA INLET			Closed
04-10-0769A	AK	Valdez-Cordova	CORDOVA, CITY OF	ORCA INLET			Completed
08-10-0487A	AK	Valdez-Cordova	CORDOVA, CITY OF	Orca Inlet	60.553	-145.8	Completed
08-10-0613A	AK	Valdez-Cordova	CORDOVA, CITY OF	Orca Inlet	60.553	-145.8	Completed
04-10-0742A	AK	Southeast Fairbanks	DELTA JUNCTION, CITY OF	DELTA RIVER			Completed
98-10-323A	AK	Southeast Fairbanks	DELTA JUNCTION, CITY OF				Closed
00-10-116A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PEARL CREEK			Completed
00-10-255A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	SOUTH SLOUGH DRAINAGE CHANNEL			Completed
01-10-224A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
01-10-224A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	TANANA RIVER			Completed
01-10-382A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	UNNAMED TRIB. OF CHENA RIVER			Completed
01-10-507A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	SLOUGH DRAINAGE CHANNEL			Completed
01-10-544A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Closed
02-10-209A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA SLOUGH			Completed
02-10-291A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
02-10-291A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	TANANA RIVER			Completed
02-10-415A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Closed
02-10-416A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	TANANA RIVER			Completed
02-10-456A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
02-10-652A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	TRIBUTARY TO CHENA SLOUGH			Completed
02-10-751A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
03-10-0133A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CRIPPLE CREEK			Completed
03-10-0312A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
03-10-0381A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
03-10-0381A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	TANANA RIVER			Completed
03-10-0417A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
03-10-0426A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
03-10-0443A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
03-10-0551A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
03-10-0696A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
04-10-0189A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
04-10-0282A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA SLOUGH			Completed
04-10-0318X	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
04-10-0486A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
04-10-0486A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	TANANA RIVER			Completed
04-10-0541A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
04-10-0549A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
04-10-0655A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	DRY SLOUGH			Completed
04-10-0676A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended



(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
05-10-0056A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CRIPPLE CREEK			Completed
05-10-0056A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	HAPPY CREEK			Completed
05-10-0215A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
05-10-0540A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
05-10-0723A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
05-10-0743A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
05-10-0865A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
05-10-0875A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER			Completed
06-10-0166A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	PONDING			Completed
06-10-B207A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Peger Lake	64.817	-147.8	Completed
06-10-B248A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.811	-147.8	Completed
06-10-B267A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River and Chena River	64.819	-147.8	Completed
06-10-B268A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.811	-147.7	Completed
06-10-B356A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River and Chena River	64.818	-147.8	Completed
06-10-B365A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Shallow Flooding	64.791	-147.5	Completed
06-10-B567A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Little Chena River	65.51	-147.2	Suspended
06-10-B583A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Shallow Flooding	64.81	-147.7	Completed
06-10-B622A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
07-10-0046A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
07-10-0209A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	90	100	Suspended
07-10-0291A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.814	-147.7	Completed
07-10-0338A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA RIVER	64.81	-147.9	Suspended
07-10-0351A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unknown	90	-100	Suspended
07-10-0426A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.767	-147.3	Suspended
07-10-0565A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
07-10-0594A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
07-10-0609A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.482	-147.4	Completed
07-10-0704A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.782	-147.5	Completed
07-10-0719A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.809	-147.9	Completed
08-10-0071A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	f	90	-100	Suspended
08-10-0351A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.838	-147.8	Completed
08-10-0420A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.82	-147.9	Completed
08-10-0521A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
08-10-0797A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.754	-147.3	Completed
08-10-0818A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
08-10-0820A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
08-10-0827A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.812	-147.8	Completed
08-10-0880A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Clear Creek	64.816	-147.6	Completed
09-10-0041A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
09-10-0271A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.808	-147.8	Completed
09-10-0352A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Tributary to Chena Slough	64.785	-147.3	Completed
09-10-0383A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.812	-147.7	Completed
09-10-0391A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
09-10-0479A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.843	-147.3	Completed
09-10-0570A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
09-10-0687A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.812	-147.8	Suspended
09-10-0723A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
09-10-1116A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
09-10-1117A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
09-10-1205A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Ponding	64.808	-147.7	Completed
09-10-1207A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Flooding Source	64.792	-147.5	Completed
10-10-0318A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
10-10-0500A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
10-10-0578A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
10-10-0753A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
10-10-1061A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
10-10-1192A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.822	-147.9	Completed
10-10-1202A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
10-10-1280A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Little Chena River	64.855	-147.4	Completed
11-10-0007A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
11-10-0088A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.823	-147.9	Completed
11-10-0197A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
11-10-0222A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Cripple Creek	64.842	-147.9	Completed
11-10-0478A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.833	-147.9	Completed
11-10-0478A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.833	-147.9	Completed
11-10-0486A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
11-10-0492A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.503	-147.5	Active
11-10-0497A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	aa	0	0	Suspended
11-10-0520A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Noyes Slough	64.856	-147.7	Completed
11-10-0597A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended
11-10-0727A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Ponding	64.806	-147.9	Completed
11-10-0742A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Flooding Source	64.819	-147.4	Completed
11-10-0779A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Tributary to Chena Slough	64.786	-147.3	Completed



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status	FIPS
11-10-0790A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.821	-147.9	Completed	#N/A
11-10-0790A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.821	-147.9	Completed	#N/A
11-10-0811A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.839	-147.5	Completed	#N/A
11-10-0836A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Cripple Creek	64.843	-147.9	Completed	#N/A
11-10-0836A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Happy Creek	64.843	-147.9	Completed	#N/A
11-10-0918A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.827	-147.9	Suspended	#N/A
11-10-0966A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Tributary to Chena Slough	64.785	-147.3	Completed	#N/A
11-10-1004A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.783	-147.4	Suspended	#N/A
11-10-1046A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.762	-147.3	Completed	#N/A
11-10-1059A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH		64.785	-147.3	Closed	#N/A
11-10-1100A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH		64.565	-147	Suspended	#N/A
11-10-1107A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.835	-147.9	Completed	#N/A
11-10-1107A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.835	-147.9	Completed	#N/A
11-10-1170A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.731	-147.3	Completed	#N/A
11-10-1195A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Noyes Slough	64.856	-147.7	Completed	#N/A
11-10-1272A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Ponding	64.758	-147.4	Completed	#N/A
11-10-1434A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.799	-147.4	Inactive	#N/A
11-10-1458A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.508	-147	Completed	#N/A
11-10-1459A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.805	-147.8	Completed	#N/A
11-10-1460A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.793	-147.4	Completed	#N/A
11-10-1475A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Suspended	#N/A
11-10-1572A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.818	-147.9	Completed	#N/A
11-10-1572A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.818	-147.9	Completed	#N/A
11-10-1631A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Little Chena River	64.855	-147.4	Completed	#N/A
11-10-1636A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Slough Drainage Channel	64.754	-147.3	Completed	#N/A
11-10-1651A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH		64.795	-147.5	Suspended	#N/A
11-10-1680A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Tributary to Chena Slough	64.776	-147.3	Completed	#N/A
11-10-1866A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.8	-147.4	Completed	#N/A
11-10-1978A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.821	-147.9	Completed	#N/A
11-10-1986A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.821	-147.9	Completed	#N/A
11-10-1994A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.793	-147.4	Completed	#N/A
11-10-2007A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.737	-148.1	Completed	#N/A
11-10-2019A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River			Inactive	#N/A
12-10-0014A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.821	-147.9	Completed	#N/A
12-10-0049A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena Slough	64.744	-147.3	Completed	#N/A
12-10-0055A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	None	64.815	-147.7	Completed	#N/A
12-10-0064A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.837	-147.9	Completed	#N/A
12-10-0075A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.506	-147	Completed	#N/A
12-10-0085A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.674	-147.2	Completed	#N/A
12-10-0085A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Twentythree Mile Slough	64.674	-147.2	Completed	#N/A
12-10-0089A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.821	-147.9	Completed	#N/A
12-10-0102A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Flooding Source	64.752	-147.3	Completed	#N/A
12-10-0109A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Noyes Slough	64.857	-147.7	Completed	#N/A
12-10-0126A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.823	-147.9	Completed	#N/A
12-10-0128A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.823	-147.9	Inactive	#N/A
12-10-0137A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Tanana River	64.675	-147.2	Completed	#N/A
12-10-0137A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Twentythree Mile Slough	64.675	-147.2	Completed	#N/A
12-10-0145A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Closed	#N/A
12-10-0146A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Inactive	#N/A
12-10-0170A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.821	-147.9	Completed	#N/A
12-10-0177A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.809	-147.9	Completed	#N/A
12-10-0181A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Unnamed Flooding Source	64.752	-147.3	Completed	#N/A
12-10-0187A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River			Active	#N/A
12-10-0195A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Active	#N/A
12-10-0205A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River	64.814	-147.9	Inactive	#N/A
12-10-0206A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Active	#N/A
12-10-0215A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	Chena River			Active	#N/A
12-10-0252A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Active	#N/A
12-10-0257A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Active	#N/A
12-10-0273A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Active	#N/A
94-RX-0079	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Completed	#N/A
96-10-089A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	ZONE A			Completed	#N/A
97-10-164A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Completed	#N/A
97-10-183A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	UNNAMED WASH			Completed	#N/A
97-10-190A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	SLOUGH DRAINAGE CHANNEL			Completed	#N/A
98-10-025A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Closed	#N/A
98-10-088A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	DRY SLOUGH			Completed	#N/A
98-10-120A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	CHENA SLOUGH			Completed	#N/A
98-10-368A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	SLOUGH DRAINAGE CHANNEL			Completed	#N/A
99-10-142A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH	SLOUGH DRAINAGE CHANNEL			Completed	#N/A
99-10-328A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Closed	#N/A
99-10-449A	AK	Fairbanks North Star	FAIRBANKS-NORTH STAR BOROUGH				Closed	#N/A
04-10-0696A	AK	Kenai Peninsula	HOMER, CITY OF				Suspended	#N/A



(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
05-10-0788A	AK	Kenai Peninsula	HOMER, CITY OF	KACHEMAK BAY			Completed
10-10-0596A	AK	Skagway-Hoonah-Angoon	HOONAH, CITY OF				Suspended
00-10-266A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
01-10-005A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
01-10-005A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	JORDAN CREEK			Completed
01-10-170A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
01-10-264A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Closed
01-10-356A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
01-10-470A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	MENDENHALL RIVER			Closed
01-10-526A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
02-10-144A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
02-10-432A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
02-10-441A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Closed
03-10-0364A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
03-10-0681A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	LEMON CREEK			Completed
03-10-0715A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Closed
03-10-0798A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
04-10-0286A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	MENDENHALL RIVER			Completed
04-10-0456A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
04-10-0631A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GOLD CREEK			Completed
05-10-0678A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	EAST FORK DUCK CREEK			Completed
06-10-B187A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF		90	100	Suspended
06-10-B430A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK	58.364	-134.6	Completed
06-10-B538A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Jordan Creek	58.376	-134.6	Completed
07-10-0032A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Suspended
07-10-0099A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel; Johnson Creek	58.339	-134.5	Completed
07-10-0145A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Duck Creek	58.366	-134.6	Completed
07-10-0363A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel	58.31	-134.5	Completed
07-10-0385A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Suspended
07-10-0397A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Suspended
07-10-0648A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel	90	-100	Completed
08-10-0378A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Unnamed Tributary of Gastineau Channel	58.351	-134.5	Completed
08-10-0646A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Mendenhall River	58.385	-134.6	Completed
09-10-0612A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel	58.363	-134.6	Suspended
09-10-0673A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Tributary to Favorite Channel	58.516	-134.8	Completed
09-10-1187A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Unamed Tributary	58.21	-134.3	Suspended
09-10-1199A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Unnamed Tributary of Gastineau Channel	58.351	-134.5	Completed
10-10-0417A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Suspended
10-10-0689A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel	58.363	-134.6	Completed
10-10-0786A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Suspended
10-10-1159A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	JORDAN CREEK	58.379	-134.6	Completed
11-10-0342A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Suspended
11-10-0837A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Unnamed Flooding Source	58.351	-134.5	Completed
11-10-0896A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Fritz Cove	58.35	-134.6	Completed
11-10-0896A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel	58.35	-134.6	Completed
11-10-1079A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Duck Creek	58.362	-134.6	Completed
11-10-1457A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Gastineau Channel	58.321	-134.5	Completed
11-10-1507A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	Unnamed Flooding Source	58.351	-134.5	Completed
12-10-0194A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Inactive
94-RX-0012	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Completed
94-RX-0038	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Completed
94-RX-0178	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Completed
95-R10-124	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Completed
95-R10-192	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Completed
95-R10-197	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Completed
96-10-196A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	MENDENHALL RIVER			Suspended
97-10-092A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
97-10-092A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	JORDAN CREEK			Completed
97-10-173A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
97-10-303A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
98-10-084A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
98-10-084A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	JORDAN CREEK			Completed
98-10-100A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
98-10-103A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	JORDAN CREEK			Completed
98-10-148A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	DUCK CREEK			Completed
98-10-411A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF	GASTINEAU CHANNEL			Completed
99-10-022A	AK	Juneau	JUNEAU, CITY AND BOROUGH OF				Closed
02-10-226A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
02-10-354A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
02-10-691A	AK	Kenai Peninsula	Kenai Peninsula Borough	SALMON CREEK			Completed
03-10-0247A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
04-10-0130A	AK	Kenai Peninsula	Kenai Peninsula Borough	SALMON CREEK			Completed
04-10-0771A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
05-10-0580A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
05-10-0588A	AK	Kenai Peninsula	Kenai Peninsula Borough	COOK INLET AT SELDOVIA			Completed
06-10-0008A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
09-10-0008A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Suspended
09-10-0155A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River	60.491	-149.8	Completed
09-10-0320A	AK	Kenai Peninsula	Kenai Peninsula Borough	Ponding	60.714	-151.4	Completed
09-10-0447A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai PeninsulaLake	60.495	-149.8	Completed
09-10-0610A	AK	Kenai Peninsula	Kenai Peninsula Borough				Suspended
09-10-1162A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River	60.491	-149.8	Completed
10-10-0305A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River	60.481	-151	Completed
10-10-0308A	AK	Kenai Peninsula	Kenai Peninsula Borough	Upper Trail Lake			Suspended
10-10-0348A	AK	Kenai Peninsula	Kenai Peninsula Borough				Suspended
10-10-0891A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River	60.504	-150.9	Completed
10-10-1355A	AK	Kenai Peninsula	Kenai Peninsula Borough				Suspended
11-10-1274A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River	60.53	-150.8	Completed
92-10-006B	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
95-R10-071	AK	Kenai Peninsula	Kenai Peninsula Borough				Completed
97-10-148A	AK	Kenai Peninsula	Kenai Peninsula Borough	Kenai Peninsula River			Completed
99-10-075A	AK	Kenai Peninsula	Kenai Peninsula Borough	TRAIL RIVER			Completed
99-10-076A	AK	Kenai Peninsula	Kenai Peninsula Borough	TRAIL RIVER			Completed
07-10-0115A	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH	TONGASS NARROWS	55.35	-131.7	Completed
09-10-0116A	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH	Hoadley Creek	55.36	-131.7	Completed
12-10-0264A	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH				Active
199530880ME	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH				Completed
97-10-294A	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH	HOADLEY CREEK			Completed
98-10-384A	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH	TONGASS NARROWS			Completed
98-10-421A	AK	Ketchikan Gateway	Ketchikan Gateway BOROUGH	TONGASS NARROWS			Completed
00-10-091A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	COTTONWOOD CREEK			Completed
01-10-422A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	LUCILE LAKE			Completed
01-10-517A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	LITTLE SUSITNA RIVER			Completed
02-10-241A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	MATANUSKA RIVER			Completed
02-10-264A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	SUSITNA RIVER			Completed
02-10-264A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	TALKEETNA RIVER			Completed
02-10-286A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	BODENBURG CREEK			Completed
02-10-408A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	BODENBURG CREEK			Closed
02-10-567A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	BODENBURG CREEK			Closed
02-10-671A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	WASHILLA CREEK			Completed
03-10-0098A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Closed
03-10-0242A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	WASILLA CREEK			Completed
03-10-0671A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	WASILLA CREEK			Completed
03-10-0783A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Completed
04-10-0330A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	LITTLE SUSITNA RIVER			Completed
04-10-0382A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	SUSITNA RIVER			Completed
04-10-0382A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	TALKEETNA RIVER			Completed
04-10-0706A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Completed
04-10-0725A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Completed
04-10-0794A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	WASILLA LAKE			Completed
04-10-0885C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Completed
05-10-0393A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KINK RIVER			Completed
05-10-0484A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Completed
05-10-0571A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	WASILLA LAKE			Completed
05-10-0795A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER			Completed
06-10-0010A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	LUCILE CREEK			Completed
06-10-B179A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Creek	61.599	-149.2	Completed
06-10-B230A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
06-10-B401A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River	61.557	-149.1	Completed
06-10-B440A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Lucile Creek	61.559	-149.8	Completed
06-10-B488A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.322	-149	Completed
06-10-B529A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Suspended
06-10-B536A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	f	90	-100	Suspended
06-10-B603A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Trapper Creek	62.297	-150.2	Completed
06-10-B627C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	gre	90	-110	Suspended
06-10-B652A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
06-10-B667A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.532	-149	Completed
07-10-0074A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	cottonwood creek	61.575	-149.4	Closed
07-10-0112A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Cottonwood Creek	61.575	-149.4	Completed
07-10-0141A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenburg Creek	61.543	-149	Completed
07-10-0146A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.541	-149	Completed
07-10-0257A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Trapper Creek	62.304	-150.2	Completed
07-10-0299A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
07-10-0314A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	90	-100	Completed
07-10-0336A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.542	-149	Completed
07-10-0353A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed



(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
07-10-0734A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenberg Creek	61.544	-149	Completed
07-10-0752A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenburg Creek	61.558	-149.1	Completed
07-10-0781C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Willow Creek	61.768	-150.1	Completed
07-10-0810C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed
08-10-0209A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Creek	61.585	-149.3	Completed
08-10-0275A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River			Suspended
08-10-0327C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River			Suspended
08-10-0515A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Creek	61.585	-149.3	Completed
08-10-0597A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.666	-149.3	Completed
08-10-0638A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Suspended
09-10-0112A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
09-10-0752A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River	61.561	-149.1	Completed
09-10-1056A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River	61.56	-149.1	Completed
10-10-0001A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-0025A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-0422A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenburg Creek	61.542	-149	Completed
10-10-0617A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-0666A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
10-10-0771A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.512	-149.1	Completed
10-10-0778A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed
10-10-0918A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-1080A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
11-10-0261A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.657	-149.3	Completed
11-10-0358A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Trapper Creek	62.313	-150.2	Completed
11-10-0503A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.527	-149	Completed
11-10-0752A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.536	-149	Completed
11-10-0830A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.691	-149.2	Suspended
11-10-1136A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Lucile Lake	61.579	-149.5	Suspended
11-10-1174A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.527	-149	Completed
11-10-1213A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.531	-149	Completed
11-10-1230A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.533	-149	Completed
11-10-1231A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.533	-149	Completed
11-10-1270A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	None	61.588	-149.3	Completed
11-10-1289A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.532	-149	Completed
11-10-1311A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1313A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1314A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1315A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1316A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1317A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1318A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1319A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1321A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1323A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1324A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1325A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1326A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1327A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1328A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1330A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1331A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.542	-149	Completed
11-10-1333A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.541	-149	Completed
11-10-1337A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1340A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1342A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1343A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1344A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1345A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1346A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1348C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1349A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1350A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.539	-149	Completed
11-10-1351A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.534	-149	Completed
11-10-1352A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.538	-149	Completed
11-10-1356A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.504	-149	Completed
11-10-1445A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.627	-149.8	Completed
11-10-1491A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.533	-149	Completed
11-10-1589A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Lucile Lake	61.578	-149.4	Completed
11-10-1594A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.539	-149	Completed
11-10-1711A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed
11-10-1712A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Lake	61.586	-149.4	Completed
11-10-1794A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Lake	61.584	-149.4	Completed
11-10-1847A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Lake	61.594	-149.4	Completed



Alaska Mapping Business Plan

Integrating Mapping, Risk Assessment, and Resilience Planning

(continued) Table 8: Letters of Map Change

Case Number	State	Name	Community Name	Flooding Source	Latitude	Longitude	Project Status
07-10-0734A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenberg Creek	61.544	-149	Completed
07-10-0752A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenburg Creek	61.558	-149.1	Completed
07-10-0781C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Willow Creek	61.768	-150.1	Completed
07-10-0810C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed
08-10-0209A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Creek	61.585	-149.3	Completed
08-10-0275A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River			Suspended
08-10-0327C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River			Suspended
08-10-0515A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Creek	61.585	-149.3	Completed
08-10-0597A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.666	-149.3	Completed
08-10-0638A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Suspended
09-10-0112A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
09-10-0752A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River	61.561	-149.1	Completed
09-10-1056A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Matanuska River	61.56	-149.1	Completed
10-10-0001A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-0025A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-0422A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Bodenburg Creek	61.542	-149	Completed
10-10-0617A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-0666A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
10-10-0771A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.512	-149.1	Completed
10-10-0778A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed
10-10-0918A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
10-10-1080A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Suspended
11-10-0261A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.657	-149.3	Completed
11-10-0358A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Trapper Creek	62.313	-150.2	Completed
11-10-0503A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.527	-149	Completed
11-10-0752A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.536	-149	Completed
11-10-0830A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.691	-149.2	Suspended
11-10-1136A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Lucile Lake	61.579	-149.5	Suspended
11-10-1174A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.527	-149	Completed
11-10-1213A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.531	-149	Completed
11-10-1230A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.533	-149	Completed
11-10-1231A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.533	-149	Completed
11-10-1270A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	None	61.588	-149.3	Completed
11-10-1289A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.532	-149	Completed
11-10-1311A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1313A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1314A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1315A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1316A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1317A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1318A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1319A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1321A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1323A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1324A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1325A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1326A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1327A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1328A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1330A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1331A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.542	-149	Completed
11-10-1333A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.541	-149	Completed
11-10-1337A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1340A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1342A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1343A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1344A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1345A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1346A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1348C	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1349A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF				Withdrawn
11-10-1350A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.539	-149	Completed
11-10-1351A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.534	-149	Completed
11-10-1352A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.538	-149	Completed
11-10-1356A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.504	-149	Completed
11-10-1445A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Little Susitna River	61.627	-149.8	Completed
11-10-1491A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	KNIK RIVER	61.533	-149	Completed
11-10-1589A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Lucile Lake	61.578	-149.4	Completed
11-10-1594A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.539	-149	Completed
11-10-1711A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Knik River	61.511	-149.1	Completed
11-10-1712A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Lake	61.586	-149.4	Completed
11-10-1794A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Lake	61.584	-149.4	Completed
11-10-1847A	AK	Matanuska-Susitna	MATANUSKA-SUSITNA, BOROUGH OF	Wasilla Lake	61.594	-149.4	Completed



APPENDIX 2: AN OVERVIEW OF COMMUNITIES IN ALASKA

LOCAL GOVERNMENT IN ALASKA

Most states have complex structures for local government that are comprised of multiple governmental units with narrow functions. For instance, the State of Washington provides for 17 different local government units including counties, cities, port districts, transit districts, cemetery districts, fire protection districts, hospital districts, irrigation and reclamation districts, library districts, parks and recreation districts, school districts, sewer districts, water districts, public utility districts, diking and drainage districts, health districts, and weed control districts. In the Lower 48, the agglomeration of local governments serving a particular area is comprised of units with overlapping boundaries. Each of these units generally has an independent elected government body with authority to levy taxes.

The framers of the Constitution of the State of Alaska the enjoyed great capacity to be innovative when it came to formulating local government structure for the State of Alaska. At the time, Alaska had only a rudimentary system of local government. The framers of Alaska’s Constitution endeavored to avoid the complex arrangement of local government and overlapping jurisdictions frequently found in the existing 48 states. Alaska’s Constitution recognizes only two types of municipal government – cities and boroughs. The term “municipality” is the generic term encompassing all classes and forms of cities and boroughs. City governments and borough governments in Alaska are municipal corporations and political subdivisions of the State of Alaska.

City governments operate at the community level. By law, the corporate boundaries of new city governments are limited to just that territory encompassing the present local community, plus reasonably predicted growth, development, and public safety needs during the next ten years. In contrast to the limits of city government, an organized borough is a regional government. Borough governments are intended to encompass large natural regions. The Alaska Constitution required all of Alaska to be divided into boroughs – organized or unorganized.

In Alaska, there are three different classifications of city government including home-rule, first-class, and second-class (Figure 1, next page, provides a map with the locations of Alaska’s municipalities). Five different classes of borough government are recognized in state law including unified home rule borough, non-unified home-rule borough, first class borough and second-class borough. In total, 116 cities are not located in an organized borough and therefore lack a regional form of government. These cities are located in the “unorganized borough”, which represents a large part of Alaska. In Alaska, 164 communities or places are incorporated as either a city or borough government in Alaska. In total, there are 145 city governments, 19 borough governments, and one community organized under federal law (Annette Island Reserve). Please see Tables 9 and 10 on pages 46 and 47-49.



Table 9: Nineteen Borough in Alaska

Borough	2016 Population (#)	Approximate Square Miles (*)	Incorporation Date
Unified Home Rule Boroughs (4)			
Municipality of Anchorage	299,037	1,940	September 15, 1975 (A)
City and Borough of Juneau	32,739	3,248	July 1, 1970 (B)
City and Borough of Sitka	8,920	4,530	December 2, 1971 (C)
City and Borough of Wrangell	2,458	3,465	30-May-08
Non-Unified Home Rule Boroughs (7)			
Denali Borough	1,810	12,610	7-Dec-90
Haines Borough	2,466	2,730	October 17, 2002 (D)
Lake and Peninsula Borough	1,629	29,560	24-Apr-89
North Slope Borough	10,528	94,770	1-Jul-72
Northwest Arctic Borough	7,944	39,150	2-Jun-86
Petersburg Borough	3,179	3,829	3-Jan-13
City and Borough of Yakutat	594	9,251	22-Sep-92
First Class Borough (1)			
Municipality of Skagway	1,065	443	20-Jun-07
Second Class Boroughs (7)			
Aleutians East Borough	3,001	15,020	23-Oct-87
Bristol Bay Borough	874	850	2-Oct-62
Fairbanks North Star Borough	98,957	7,430	1-Jan-64
Kenai Peninsula Borough	58,060	21,330	1-Jan-64
Ketchikan Gateway Borough	13,758	6,262	6-Sep-63
Kodiak Island Borough	13,563	12,150	30-Sep-63
Matanuska-Susitna Borough	102,598	25,260	1-Jan-64

* Includes water area within the three-mile limit.

Certified by Commissioner, Dept. of Commerce, Community, and Economic Development.



Table 10: 145 Cities in Alaska

Classification	2016 Population	Incorp.Date
Home Rule Cities (11)		
Cordova	2,386	1909
Fairbanks (5)	31,957	1903
Kenai (7)	7,098	1960
Ketchikan (8)	8,191	1900
Kodiak (9)	6,124	1940
Nenana	381	1921
North Pole (5)	2,145	1953
Palmer (11)	6,268	1951
Seward (7)	2,663	1912
Soldotna (7)	4,376	1967
Valdez	4,011	1901

Classification	2016 Population	Incorp.Date
Second Class Cities (116)		
Adak	309	2001
Akhiok (9)	97	1974
Akiak	389	1970
Akutan (1)	1,000	1979
Alakanuk	707	1969
Aleknagik	217	1973
Allakaket	165	1975
Ambler (13)	260	1971
Anaktuvuk Pass (12)	393	1959
Anderson (4)	238	1962
Angoon	408	1963
Aniak	517	1972
Anvik	77	1969
Atka	65	1988
Atkasuk (12)	248	1982
Bethel	6,244	1957
Bettles	10	1985
Brevig Mission	418	418
Buckland (13)	507	1966
Chefornak	442	1974
Chevak	1,030	1967
Chignik (10)	96	1983
Chuathbaluk	118	1975
Clark's Point	54	1971
Coffman Cove	204	1989
Cold Bay (1)	59	1981
Deering (13)	143	1970
Delta Junction	1,130	1960
Diomedede	88	1970
Eagle	79	1901
Edna Bay	41	2014

First Class Cities (18)		
Craig	1,102	1922
Dillingham	2,316	1963
Galena	488	1971
Homer (7)	5,252	1964
Hoonah	793	1946
Hydaburg	404	1927
Kake	605	1952
King Cove (1)	923	1949
Klawock	814	1929
Nome	3,777	1901
Pelican	78	1943
Saint Mary's	587	1967
Sand Point (1)	943	1966
Seldovia (7)	206	1945
Tanana	224	1961
Unalaska	4,448	1942
Utqiagvik (Barrow) (12)	5,041	1958
Wasilla (11)	8,704	1974

1 = City located within the Aleutians East Borough
 2 = City located within the Bristol Bay Borough (none)
 3 = City located within the City and Borough of Yakutat (none)
 4 = City located within the Denali Borough
 5 = City located within the Fairbanks North Star Borough
 6 = City located within the Haines Borough (none)

7 = City located within the Kenai Peninsula Borough
 8 = City located within the Ketchikan Gateway Borough
 9 = City located within the Kodiak Island Borough
 10 = City located within the Lake and Peninsula Borough
 11 = City located within the Matanuska-Susitna Borough
 12 = City located within the North Slope Borough



Table 10: 145 Cities in Alaska, *continued*

Classification	2016 Population	Incorp. Date
Second Class Cities (continued)		
Eek	341	1970
Egegik (10)	85	1995
Ekwok	113	1974
Elim	339	1970
Emmonak	856	1964
False Pass (1)	73	1990
Fort Yukon	558	1959
Gambell	721	1963
Golovin	182	1971
Goodnews Bay	265	1970
Grayling	189	1969
Gustavus	558	2004
Holy Cross	155	1968
Hooper Bay	1,188	1966
Houston (11)	2,163	1966
Hughes	91	1973
Huslia	326	1969
Kachemak (7)	479	1961
Kaktovik (12)	262	1971
Kaltag	172	1969
Kasaan	89	1976
Kiana (13)	421	1964
Kivalina (13)	429	1969
Kobuk (13)	148	1973
Kotlik	621	1970
Kotzebue (13)	3,295	1958
Koyuk	331	1970
Koyukuk	97	1973
Kupreanof (14)	21	1975
Kwethluk	805	1975
Larsen Bay (9)	77	1974

Classification	2016 Population	Incorp. Date
Second Class Cities (continued)		
Lower Kalskag	288	1969
Manokotak	496	1970
Marshall	459	1970
McGrath	302	1975
Mekoryuk	215	1969
Mountain Village	860	1967
Napakiaik	355	1970
Napaskiak	458	1971
New Stuyahok	497	1972
Newhalen (10)	178	1971
Nightmute	285	1974
Nikolai	94	1970
Nondalton (10)	153	1971
Noorvik (13)	644	1964
Nuiqsut (12)	446	1975
Nulato	246	1963
Nunam Iqua	201	1974
Nunapitchuk	584	1969
Old Harbor (9)	231	1966
Ouzinkie (9)	159	1967
Pilot Point (10)	74	1992
Pilot Station	647	1969
Platinum	48	1975
Point Hope (12)	711	1966
Port Alexander	58	1974
Port Heiden (10)	98	1972
Port Lions (9)	177	1966
Quinhagak	735	1975
Ruby	178	1973
Russian Mission	331	1970
Saint George	72	1983

1 = City located within the Aleutians East Borough
 2 = City located within the Bristol Bay Borough (none)
 3 = City located within the City and Borough of Yakutat (none)
 4 = City located within the Denali Borough
 5 = City located within the Fairbanks North Star Borough
 6 = City located within the Haines Borough (none)

7 = City located within the Kenai Peninsula Borough
 8 = City located within the Ketchikan Gateway Borough
 9 = City located within the Kodiak Island Borough
 10 = City located within the Lake and Peninsula Borough
 11 = City located within the Matanuska-Susitna Borough
 12 = City located within the North Slope Borough

**Table 10: 145 Cities in Alaska, *continued***

Classification	2016 Population	Incorp. Date
Second Class Cities (continued)		
Saint Michael	417	1969
Saint Paul	397	1971
Savoonga	729	1969
Saxman (8)	418	1929
Scammon Bay	570	1967
Selawik (13)	847	1977
Shageluk	77	1970
Shaktoolik	281	1969
Shishmaref	597	1969
Shungnak (13)	299	1967
Stebbins	630	1969
Teller	263	1963
Tenakee Springs	140	1971
Thorne Bay	532	1982
Togiak	893	1969
Toksook Bay	656	1972
Unalakleet	758	1974
Upper Kalskag	231	1975
Wainwright (12)	557	1962
Wales	167	1964
Whale Pass	45	2017
White Mountain	209	1969
Whittier	248	1969
Organized Under Federal Law		
Metlakatla	1,467	1944

1 = City located within the Aleutians East Borough

2 = City located within the Bristol Bay Borough (none)

3 = City located within the City and Borough of Yakutat (none)

4 = City located within the Denali Borough

5 = City located within the Fairbanks North Star Borough

6 = City located within the Haines Borough (none)

7 = City located within the Kenai Peninsula Borough

8 = City located within the Ketchikan Gateway Borough

9 = City located within the Kodiak Island Borough

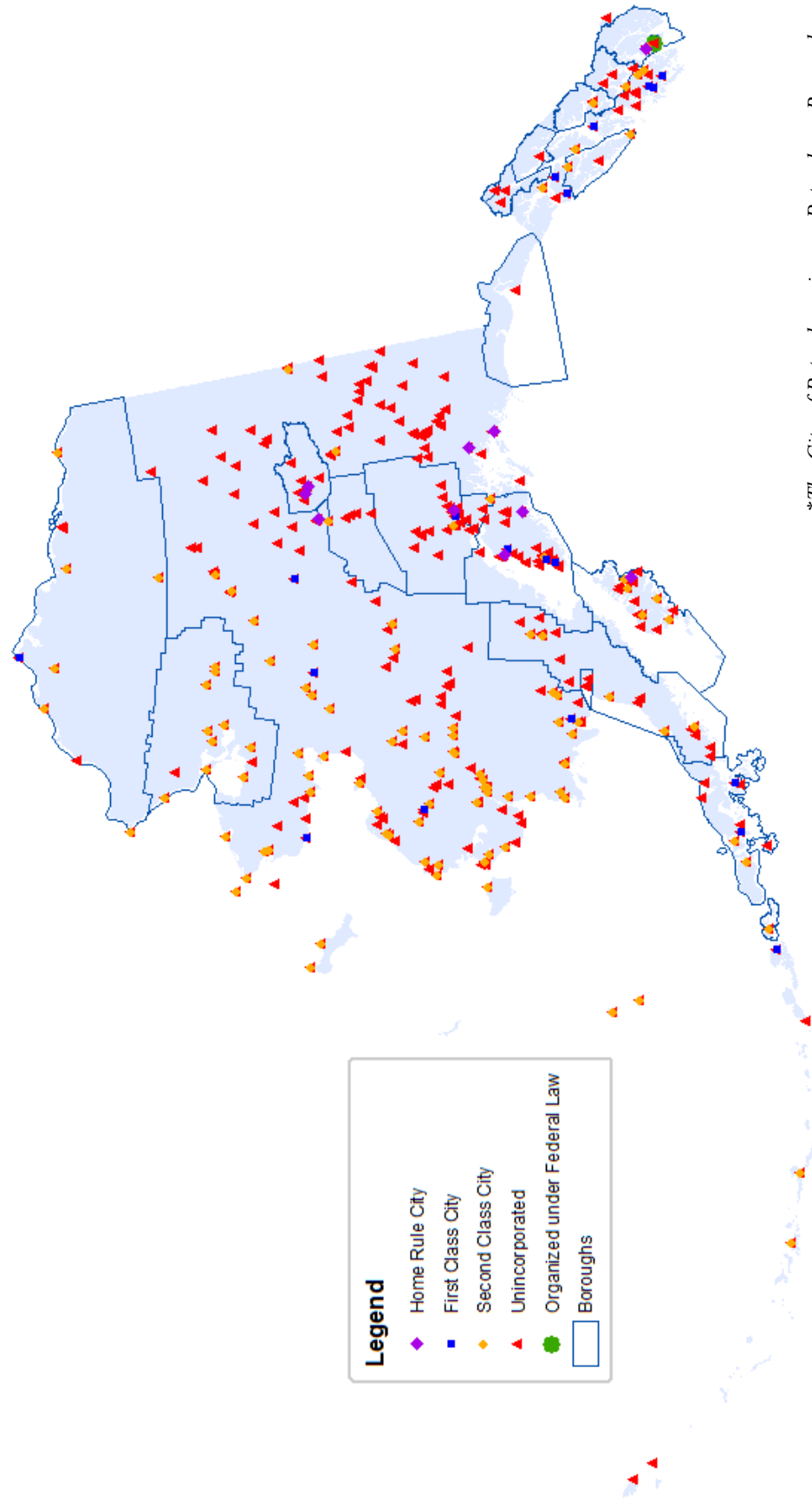
10 = City located within the Lake and Peninsula Borough

11 = City located within the Matanuska-Susitna Borough

12 = City located within the North Slope Borough



Figure 1: Map of Alaska Communities – Organized and Unorganized



**The City of Petersburg is now Petersburg Borough.*



LEGAL AUTHORITY FOR PLANNING, PLATTING AND LAND USE REGULATION

Community size, cultural make-up, and type of local governing structure influence the level and character of local community planning. Only cities and boroughs can have land use powers. Land use regulation, as authorized by adopted municipal planning and zoning powers, is required for only a minority of communities including boroughs, home rule cities, and first class cities. Planning and zoning is elective for second class cities, which are largely located in rural Alaska.

In total, only a minority (21 %) of Alaska's municipalities implement land use regulation. In contrast, the majority of communities (79 %) may or may not engage in community planning, but do not regulate land use. These communities engage in community planning for the purpose of prioritizing grant funding, developing a shared community vision, community development strategy, and improving overall quality of life; however, they are not authorized to implement land use regulation. One of the major motivations for rural communities to engage in community planning has been to fulfill a government requirement in order to receive financial and technical assistance for physical infrastructure projects and local public services.

Of Alaska's 164 municipalities, nearly half (49 %) are not required by law to exercise planning and zoning powers. In contrast, slightly over half (51 %) either independently exercise planning and zoning powers or are part of a borough that has responsibility for area-wide planning and zoning. Of noteworthy importance, the wide majority of Alaska's communities and nearly half of Alaska's municipalities do not exercise planning and zoning authority; local residents are without land use regulation services. These communities do not have the authority to regulate development in the floodplain and are not candidates for the NFIP. In short, only 86 Alaska municipalities have planning and zoning authority or are in a borough with planning and zoning authority and are subsequently eligible to join the NFIP.

By 1900 the United States Army had mapped Alaska's prominent mountain ranges and larger rivers. The United States Geological Survey (USGS), which began topographic mapping in 1882, took over from the Army and became the primary mapping and exploration agency in Alaska. Each year the USGS collaborated with geologists working around the territory to make maps, develop photographs, keep field notes, and write reports. This information increased the ability of the miners and others to locate and expedite the development of resources in Alaska. Today, remote sensing techniques are commonly used for mapping. Photogrammetry and LiDAR (Light Detection and Ranging) are two of the common remote sensing mapping techniques. They are sophisticated techniques and technology that require skilled technicians and cartographers. The drastically improved technology allows for increased and diversified map uses including mineral exploration, transportation design, and urban planning. The expense of this type of technology and Alaska's large land mass, combined with the limited local and regional government budgets, make the adoption of this technology for Alaska problematic for many communities.



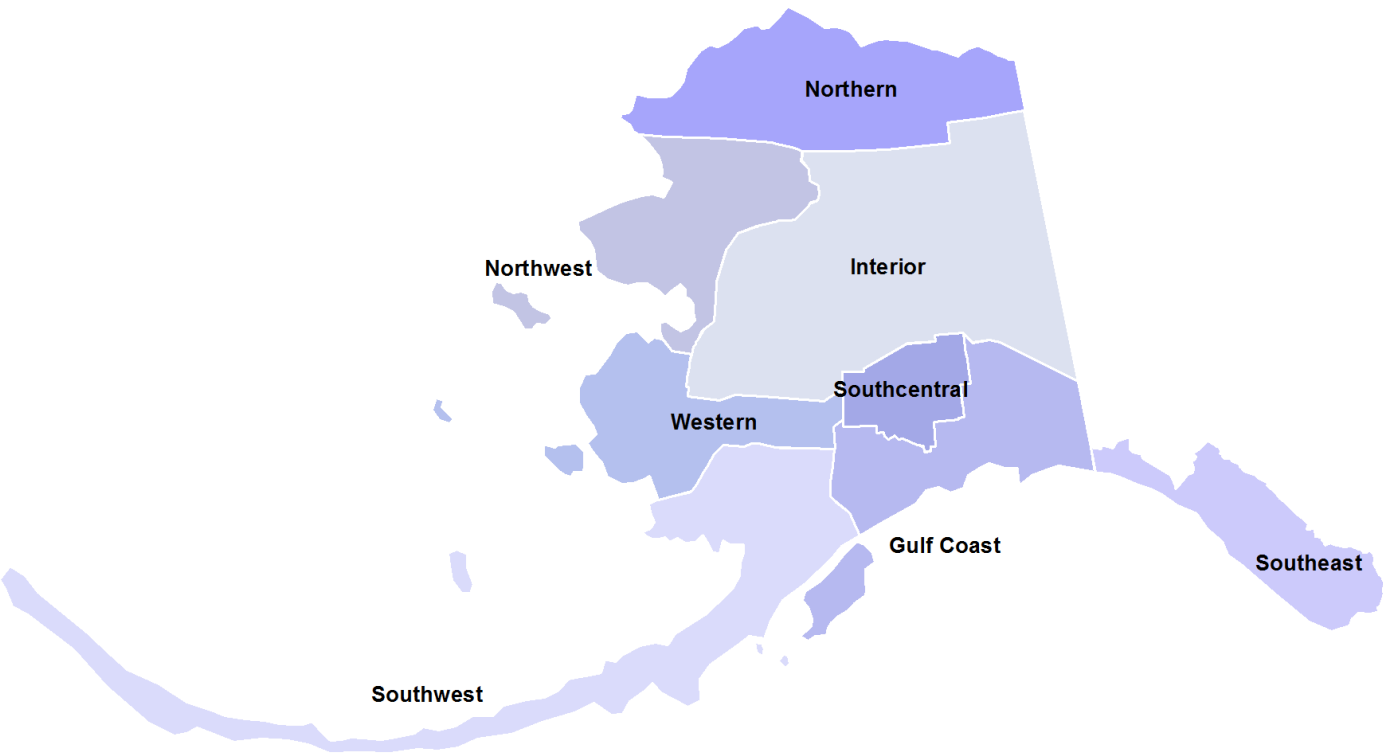
ALASKA’S REGIONS

In Alaska, the majority of municipalities are not connected to the road system (86%). Only a minority are connected by road to other places (14%). Historically, urban and rural communities located either along the coast or on a river as waterways served as the primary means to transport people and goods. Today, nearly all of Alaska’s municipalities are located either on a river (41%), on the coast (36%), or both (24%).

Communities are unequally distributed across eight Alaska regions including northern (2%), northwest (8%), western (155%), Southwest (13%), interior (21 %), Southcentral (10%), gulf coast (20 %), and Southeast (11 %) regions (Figure 3). In geographical terms, non-Native communities are mainly concentrated in Southeast, Southcentral, and Southwest Alaska while Native communities are largely located in northern, western, and interior Alaska.

What makes life challenging for many Alaskans is not Alaska’s extreme geography and topographical features, it is what is absent from everyday life on the frontier — essential community infrastructure, and easy access. This is especially true for Alaskans residing in rural or semi-rural regions.

Figure 2: Alaska’s Regions





Most Alaska communities cannot be reached by road; movement of goods and people is not only difficult, but costly. Mountain ranges, waterways, and distance make a statewide electric system prohibitively expensive. Consequently, the majority of rural villages are not connected to a major power grid. Many communities still lack basic indoor plumbing, including running water, flush toilets, and showers, resulting in higher incidence of hygiene-related childhood disease.

Jobs are scarce and small population centers oftentimes do not have hospitals. However, the difference between rural Alaska and “any other rural area” is that in other states, people can drive to the nearest large town to obtain essential services. Commuting is generally not an option for the people of rural Alaska; there are fewer miles of road in Alaska than in any other state. For most communities, supplies must be transported by boat or airplane. To obtain advanced education, training, medical, or other services, residents must travel by air to the nearest regional hub community or Anchorage – the state’s largest service center.

For all its size, Alaska’s total population is the nearly the smallest in the nation at approximately 739,828 people (Alaska Department of Labor and Workforce Development, 2017). Alaska Natives comprise nearly 15.2% of Alaska’s total population, the largest percentage in the United States (U.S. Census Bureau, 2017). A “frontier” is defined as a region that contains six or fewer persons per square mile; Alaska has only two persons per square mile.

ALASKA’S POPULATION AND ITS DISTRIBUTION

The 2016 estimated population in Alaska’s 164 municipalities ranged from 10 (Bettles) to 299,037 (Anchorage) residents. The average municipal population was 5,071 residents. Of noteworthy importance, with a total population of 299,037 residents (2016), Anchorage is the largest municipality in Alaska and an outlier in regards to population. Consequently, Anchorage skews the mean; median is a more appropriate representation of the general size of Alaska’s municipalities.

Similar to all Alaska’s communities (e.g., incorporated and unincorporated communities), the majority of Alaska’s municipalities are small. One hundred and twenty-eight (128) municipalities (79%) are considered “rural”, with populations less than 1,500 residents. Over half (55%) of municipalities are extremely small with populations less than 500 residents; 13% are less than 100 residents. In contrast, only six municipalities (4%) contain 30,000 residents or more including the City and Borough of Juneau, City of Fairbanks, Fairbanks North Star Borough, Kenai Peninsula Borough, Mat-Su Borough, and the Municipality of Anchorage.

In total, 31 municipalities are also active NFIP participants including 19 cities and 12 boroughs; three cities are suspended including Kenai, Soldotna, and Wrangell. The City of Delta Junction withdrew from the NFIP in 2015. Municipalities enrolled in the NFIP program are generally the larger municipalities. Specifically, NFIP municipalities range from 97 (Koyukuk) to 299,037 (Anchorage) residents.



The NFIP community average population is 23,404. Unlike most Alaska communities or municipalities, NFIP municipalities are generally more urban or semi-urban in nature. Only a minority (41%) are considered “rural” with populations less than 1,500 residents. Over half (59%) are considered urban or semi-urban with populations greater than 1,500 residents; 19% are greater than 10,000 residents. Five municipalities (16%) are 30,000 residents or more including the City and Borough of Juneau, Fairbanks North Star Borough, Kenai Peninsula Borough, Mat-Su Borough, and the Municipality of Anchorage.

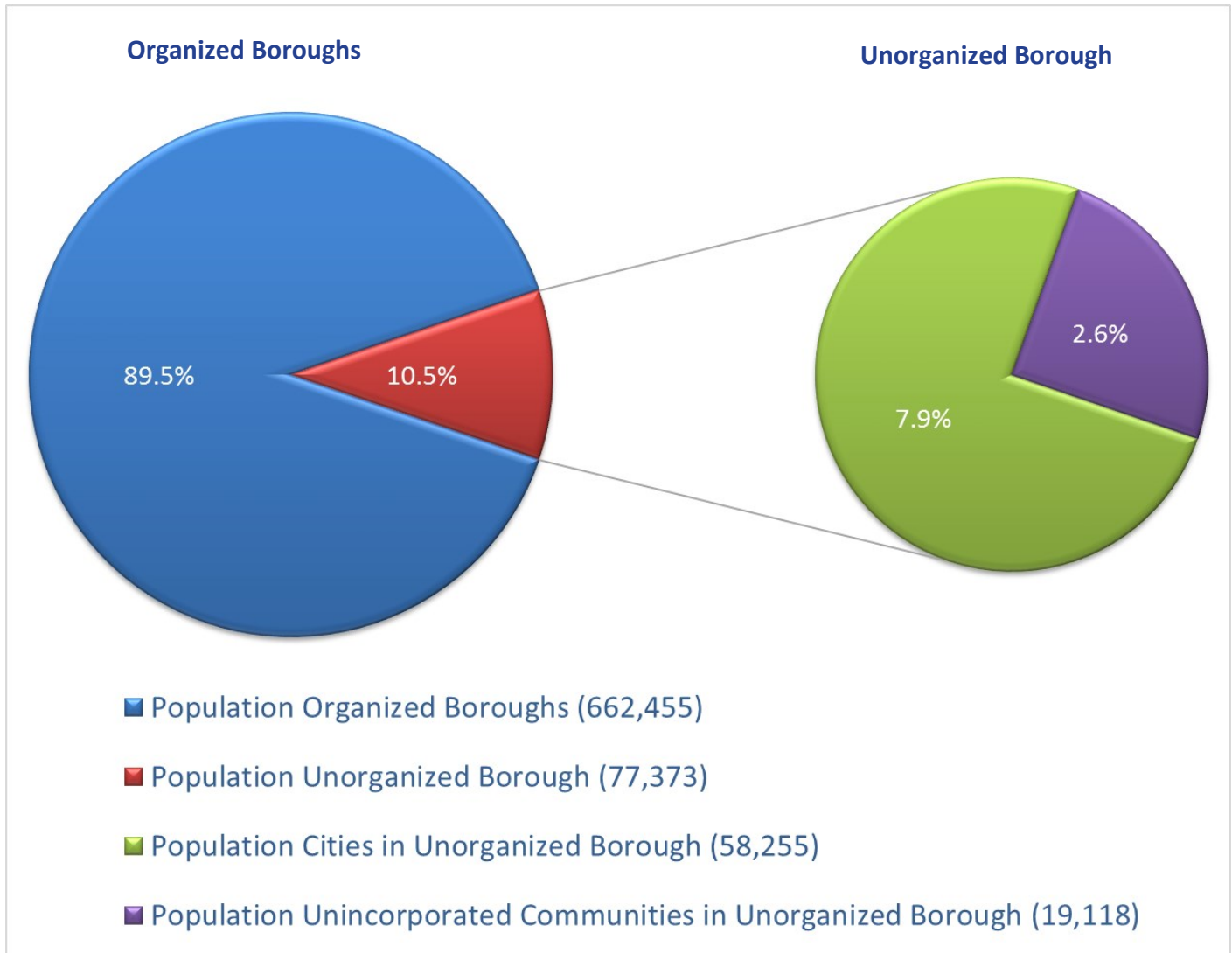
Alaska’s population (approximately 739,828) resides in over 300 distinct communities, each with its own unique history, culture, and organizational structure. Alaska’s communities are the most remote and rural in the nation, scattered across vast tracts of undeveloped land and separated by challenging topographical features. To overcome access challenges, many rural communities are located along coastal shorelines and rivers that serve as transportation corridors needed to move supplies and provide access to important subsistence resources. Other communities were settled at present day locations due to proximity to subsistence resources, availability of services, natural resource development, and other unique regional opportunities. Communities are mainly concentrated in the southern half of Alaska; only nine villages exist along the Arctic North Slope.

POPULATION CHANGE IN ALASKAN COMMUNITIES

Population change in Alaska is a complex issue. While the state as a whole is growing, with the largest growth rates experienced in the Southcentral region, many other regions of the state are experiencing overall population declines. Many suggest differential population growth is best described as a rural versus urban divide. Generally speaking, Alaska’s rural population is decreasing due to out-migration, lower birth rates, and an aging population. The southeast region, in particular has lost the most residents, absorbing 69% of the total statewide rural population decline from 2000 to 2008 (DCRA, 2009).

Alaska’s 164 municipalities generally reflect the same declining population as experienced by rural communities across most of Alaska. Although total population change between 2000 and 2008 ranged from +46% to -49%, the mean population change was -3%; the median was -2%. During the 2000 to 2008 period, Bettles experienced the greatest population loss (-49%), while Houston experienced the greatest population growth (+46%).

Considering all Alaska municipalities, the majority (57%) experienced population loss during the 2000 to 2008 period ranging from -49% (Bettles) to -1% (Napakiak, Fort Yukon, Kiana, Allakaket, Juneau, Seldovia, and Togiak). In contrast, 40% experienced population increase ranging from +1% (Sand Point, Anaktuvuk Pass, Newhalen, Noorvik, Mountain Village, and Kotzebue) to + 46% (Houston). Four municipalities (Eagle, Kobuk, Aleutians East Borough, and Fairbanks) experienced zero net loss or gain during the 2000 – 2008 period.

**Figure 3: Population Distribution in Alaska's Organized and Unorganized Boroughs****Total State Population Estimate 2016: 739,828****Source:** Alaska Department of Labor and Workforce Development, Research and Analysis Section



OTHER SOCIO-ECONOMIC CHARACTERISTICS OF ALASKA'S COMMUNITIES

Income

Defying misperceptions originating in the Lower 48, most Alaskans that live in a municipality are not wealthy Americans. Alaska's municipalities (164) range in per capita income from \$6,503 to \$31,747; mean is \$15,245 (2000). Nearly half (47%) of all municipalities have a per capita income of less than \$14,000 per year; slightly over half (54%) have a per capita income greater than \$14,000 per year. Only one-third (32%) of all municipalities have a per capita income greater than \$20,000 per year.

Municipalities participating in the NFIP have slightly higher per capita income. Specifically, NFIP participants (31) range in per capita income from \$6,503 to \$27,700; mean is \$19,408 (2000). Over half (59%) report a per capita income of greater than \$20,000 per year. Less than one-quarter (22%) report a per capita income of less than \$14,000 per year.

Poverty

In 2000, the percent of population in poverty in Alaska's municipalities (164) ranged from zero percent to 64% percent; mean was 18%. Nearly three-quarters (71%) of all municipalities have a poverty rate of less than 25%. In contrast, zero municipalities have a poverty rate greater than 75%. Approximately one-quarter (28%) have a 25% to 49% poverty rate. In 2000, municipalities participating in the NFIP (32) had significantly lower poverty rates. Specifically, the percent of population living in poverty ranged from four percent to 25%; mean was 13%. Of noteworthy importance, no NFIP participants had poverty rates higher than 49%. The overwhelming majority (91%) have poverty rates less than 25%.

Housing Units

In 2000, the quantity of housing units in Alaska's municipalities (164) ranged from 26 to 100,368; the mean was 1764. Similar to all municipalities, the quantity of housing units in municipalities participating in the NFIP (31) ranged from 55 to 100,368 (Table 9, next page). Of noteworthy importance, average quantity of housing units in NFIP participants (7,164) is significantly greater than all municipalities (1,764).

**Table 11: 2000 Housing Units**

Housing Units	Municipalities (163)	NFIP Participants (32)
Minimum	26	55
Maximum	100,368	100,368
Mean	1,764	7,164

Critical Facilities

In the United States, Alaska ranks at the very bottom in the percentage of its rural population who have adequate household plumbing facilities, including running water. In many villages, even those near urban areas, the majority of households may not have running water. Over the past twentyfive years, the federal and state government have made significant investments in critical facility infrastructure in rural communities including roads, public use buildings, medical clinics, housing water/wastewater facilities, electrical systems, schools, bulk fuel storage facilities, airports, boardwalks, and harbors.

Over the past forty years, billions of federal dollars have been spent on the most critical facility infrastructure – water and wastewater utilities. Although the capital utility projects are grant-funded for construction costs, the limited cash economies in many rural Alaska communities create a fragile economic base for ongoing operations and maintenance of infrastructure. Oftentimes, built infrastructure operation and maintenance costs far exceed the financial capabilities of a local community to pay for the local service. That is, limited local economies do not fully support the increasing operation and maintenance costs associated with critical facilities.

The current fiscal condition in rural Alaska, in combination with lack of comprehensive infrastructure policy, makes sustainability of capital project investments difficult. Local governments in the Lower 48 generally fund infrastructure projects via revenue or general obligation bonds. In comparison, community critical facility infrastructure is generally 100% grant-funded. As progress continues in constructing critical facilities, communities with new systems must be able to independently operate and maintain them. Meeting the associated operation and maintenance costs will continue to be a significant challenge for smaller communities with limited local economic bases. Furthermore, a shrinking state operating budget results in fewer grants and loans to all Alaska communities. The most challenged of Alaska's communities are unlikely to receive resources to maintain and operate public services as state and federal government revenue declines. The development, operation, and maintenance of critical facility infrastructure are further challenged by escalating energy, materials, and labor expenses.

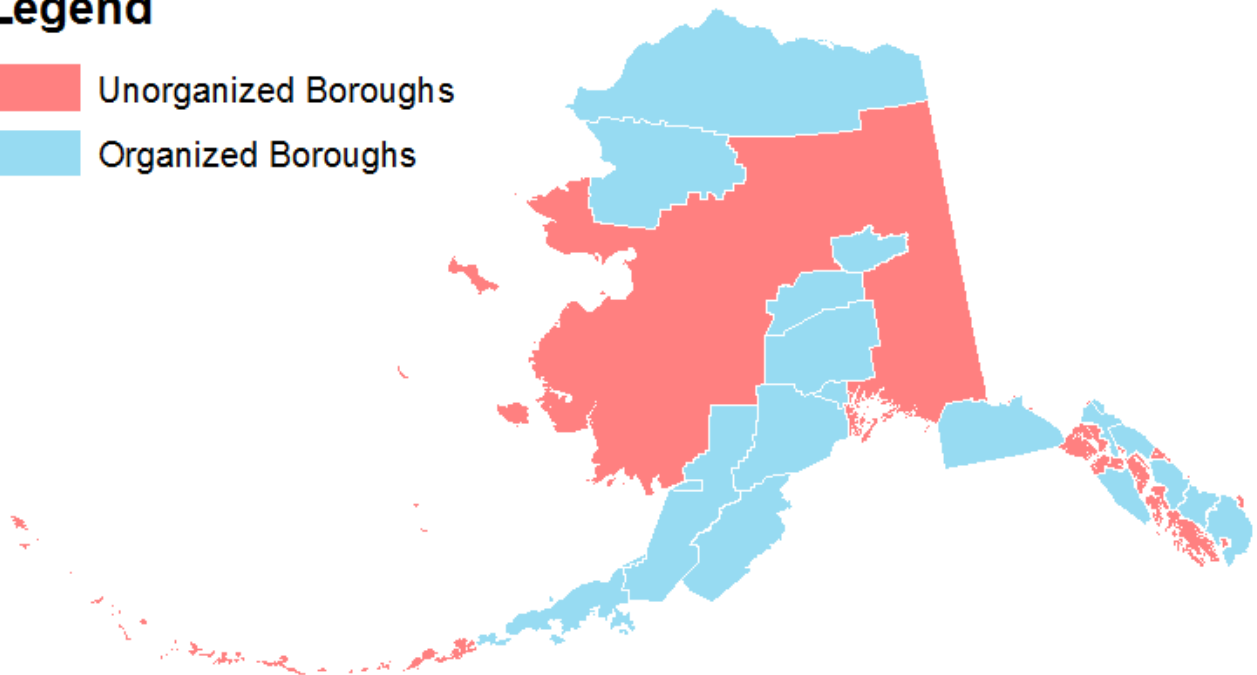


Many Alaska communities exist without running water and use plastic buckets for toilets, euphemistically referred to as “honeybuckets”. Despite Alaska’s abundance of water, it is often extremely difficult to obtain water for drinking and sanitation – especially in rural areas. In many communities, piped water systems do not exist inside homes and domestic water used by residents must be hauled by hand from central watering points, a water well, or a washeteria. Similarly, communities without piped wastewater generally utilize a honeybucket haul system as a principal method of sewage disposal. In those communities, the honeybucket is a five-gallon bucket with a toilet seat attached. Once filled, the bucket is hand carried and emptied into a neighborhood haul container or sewage lagoon. In these communities, honeybuckets are used in homes, commercial buildings, and even medical clinics. With government investment in critical facilities, the percentage of homes with piped water and sewer has increased; however, there are still a significant quantity of households that are hand-carrying water and employing honeybuckets for wastewater removal. In 2007, the percentage of households without adequate plumbing in Alaska’s 164 municipalities ranged from zero percent to one-hundred percent; the mean percent was 46%.

Figure 4: Alaska's Unorganized Boroughs

Legend

- Unorganized Boroughs
- Organized Boroughs





APPENDIX 3: DETAILED NFIP COMMUNITY POPULATION AND LOCAL GOVERNMENT

Table 12: NFIP Community Population and Local Government

COMMUNITY	POPULATION	INCORP TYPE	BOROUGH
City of Aniak	517	2nd Class City	Unorganized
City of Bethel	6,244	2nd Class City	Unorganized
City of Cordova	2,386	Home Rule City	Unorganized
City of Dillingham	2,316	1st Class City	Unorganized
City of Emmonak	856	2nd Class City	Unorganized
City of Fort Yukon	558	2nd Class City	Unorganized
City of Galena	488	1st Class City	Unorganized
City of Homer	5,252	1st Class City	Kenai Peninsula Borough
City of Hoonah	793	1st Class City	Unorganized
City of Kotzebue	3,295	2nd Class City	Northwest Arctic Borough
City of Koyukuk	97	2nd Class City	Unorganized
City of Kwethluk	805	2nd Class City	Unorganized
City of McGrath	302	2nd Class City	Unorganized
City of Nenana	381	Home Rule City	Unorganized
City of Nome	3,777	1st Class City	Unorganized
City of Seward	2,663	Home Rule City	Kenai Peninsula Borough
City of Shishmaref	597	2nd Class City	Unorganized
City of Togiak	893	2nd Class City	Unorganized
City of Valdez	3,939	Home Rule City	Unorganized
Total NFIP City Population	36,159		

COMMUNITY	POP. EST. 2016	INCORP TYPE
Anchorage Municipality	299,037	Unified Home Rule

Fairbanks North Star Borough	98,957	2nd Class Borough
Badger CDP	19,328	Unincorporated
Chena Ridge CDP	6,365	Unincorporated
College CDP	12,812	Unincorporated
Eielson AFB CDP	2,918	Unincorporated
Ester CDP	2,492	Unincorporated
Fairbanks, City of	31,957	Home Rule City
Farmers Loop CDP	4,823	Unincorporated
Fox CDP	439	Unincorporated
Goldstream CDP	3,668	Unincorporated
Harding-Birch Lakes CDP	314	Unincorporated
Moose Creek CDP	650	Unincorporated
North Pole, City of	2,145	Home Rule City



(continued) **Table 10: NFIP Community Population and Local Government**

COMMUNITY	POP. EST. 2016	INCORP TYPE
Pleasant Valley CDP	704	Unincorporated
Salcha CDP	1,029	Unincorporated
South Van Horn CDP	567	Unincorporated
Steele Creek CDP	6,998	Unincorporated
Two Rivers CDP	703	Unincorporated
Balance	1,045	Unincorporated
Haines Borough	2,466	Home Rule Borough
Covenant Life CDP	57	Unincorporated
Excursion Inlet CDP	12	Unincorporated
Haines CDP	1,744	Unincorporated
Lutak CDP	71	Unincorporated
Mosquito Lake CDP	256	Unincorporated
Mud Bay CDP	195	Unincorporated
Balance	131	Unincorporated
Juneau, City of and Borough	32,739	Unified Home Rule
Kenai Peninsula Borough	58,060	2nd Class Borough
Anchor Point CDP	2,043	Unincorporated
Bear Creek CDP	2,066	Unincorporated
Beluga CDP	16	Unincorporated
Clam Gulch CDP	167	Unincorporated
Cohoe CDP	1,489	Unincorporated
Cooper Landing CDP	250	Unincorporated
Crown Point CDP	63	Unincorporated
Diamond Ridge CDP	1,230	Unincorporated
Fox River CDP	674	Unincorporated
Fritz Creek CDP	2,107	Unincorporated
Funny River CDP	951	Unincorporated
Halibut Cove CDP	85	Unincorporated
Happy Valley CDP	624	Unincorporated
Hope CDP	189	Unincorporated
Kachemak, City of	479	2nd Class City
Kalifornsky CDP	8,675	Unincorporated
Kasilof CDP	532	Unincorporated
Lowell Point CDP	76	Unincorporated
Moose Pass CDP	231	Unincorporated
Nanwalek CDP	300	Unincorporated
Nikiski CDP	4,616	Unincorporated



(continued) Table 10: NFIP Community Population and Local Government

COMMUNITY	POP. EST. 2016	INCORP TYPE
Nikolaevsk CDP	287	Unincorporated
Ninilchik CDP	860	Unincorporated
Point Possession CDP	0	Unincorporated
Port Graham CDP	167	Unincorporated
Primrose CDP	72	Unincorporated
Ridgeway CDP	2,204	Unincorporated
Salamatof CDP	1,097	Unincorporated
Seldovia, City of	206	Unincorporated
Seldovia Village CDP	177	Unincorporated
Sterling CDP	6,011	1st Class City
Sunrise CDP	12	Unincorporated
Tyonek CDP	182	Unincorporated
Balance	533	Unincorporated

Ketchikan Gateway Borough	13,758	2nd Class Borough
Ketchikan, City of	8,191	Home Rule City
Loring CDP	4	Unincorporated
Saxman, City of	418	2nd Class City
Balance	5,145	Unincorporated

Lake and Peninsula Borough	1,629	Home Rule Borough
Chignik, City of	96	2nd Class City
Chignik Lagoon CDP	85	Unincorporated
Chignik Lake CDP	64	Unincorporated
Egegik, City of	85	2nd Class City
Igiugig CDP	53	Unincorporated
Iliamna CDP	110	Unincorporated
Ivanof Bay CDP	7	Unincorporated
Kokhanok CDP	152	Unincorporated
Levelock CDP	87	Unincorporated
Newhalen, City of	178	2nd Class City
Nondalton, City of	153	2nd Class City
Pedro Bay CDP	32	Unincorporated
Perryville CDP	110	Unincorporated
Pilot Point, City of	74	Unincorporated
Pope-Vannoy Landing CDP	4	Unincorporated
Port Alsworth CDP	218	Unincorporated
Port Heiden, City of	98	2nd Class City
Ugashik CDP	15	Unincorporated
Balance	8	Unincorporated



(continued) **Table 10: NFIP Community Population and Local Government**

COMMUNITY	POP. EST. 2016	INCORP TYPE
Matanuska-Susitna Borough	102,598	2nd Class Borough
Big Lake CDP	3,655	Unincorporated
Buffalo Soapstone CDP	980	Unincorporated
Butte CDP	3,560	Unincorporated
Chase CDP	34	Unincorporated
Chickaloon CDP	253	Unincorporated
Eureka Roadhouse CDP	44	Unincorporated
Farm Loop CDP	1,198	Unincorporated
Fishhook CDP	5,805	Unincorporated
Gateway CDP	7,084	Unincorporated
Glacier View CDP	245	Unincorporated
Houston, City of	2,163	2nd Class City
Knik-Fairview CDP	18,493	Unincorporated
Knik River CDP	795	Unincorporated
Lake Louise CDP	40	Unincorporated
Lakes CDP	9,060	Unincorporated
Lazy Mountain CDP	1,562	Unincorporated
Meadow Lakes CDP	8,540	Unincorporated
Palmer, City of	6,268	Home Rule City
Petersville CDP	4	Unincorporated
Point MacKenzie CDP	1,782	Unincorporated
Skwentna CDP	36	Unincorporated
Susitna CDP	13	Unincorporated
Susitna North CDP	1,500	Unincorporated
Sutton-Alpine CDP	1,426	Unincorporated
Talkeetna CDP	903	Unincorporated
Tanaina CDP	9,121	Unincorporated
Trapper Creek CDP	489	Unincorporated
Wasilla, City of	8,704	1st Class City
Willow CDP	2,047	Unincorporated
Balance	6,794	Unincorporated



(continued) Table 10: NFIP Community Population and Local Government

COMMUNITY	POP. EST. 2016	INCORP TYPE
Northwest Arctic Borough	7,944	Home Rule Borough
Ambler, City of	260	2nd Class City
Buckland, City of	507	2nd Class City
Deering, City of	143	2nd Class City
Kiana, City of	421	2nd Class City
Kivalina, City of	429	2nd Class City
Kobuk, City of	148	2nd Class City
Noatak CDP	583	Unincorporated
Noorvik, City of	644	2nd Class City
Red Dog Mine CDP	309	Unincorporated
Selawik, City of	847	2nd Class City
Shungnak, City of	299	2nd Class City
Balance	59	Unincorporated
<i>* Does not include the City of Kotzebue</i>		
Petersburg Borough	3,179	Non-Unified Home Rule Borough
Hobart Bay CDP	1	Unincorporated
Kupreanof, City of	21	2nd Class City
Petersburg CDP	2,935	Unincorporated
Balance	222	Unincorporated
Sitka, City of and Borough	8,920	Unified Home Rule Borough
Skagway Municipality	1,065	1st Class Borough
Skagway CDP	1,004	Unincorporated
Balance	61	Unincorporated
Total NFIP Borough Population	631,181	



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APPENDIX 4: FLOODING, EROSION AND RELATED HAZARDS IMPACTING ALASKA'S COMMUNITIES

IDENTIFICATION OF ISSUES

Some 6,600 miles of Alaska's coastline and many of the low-lying areas along the state's rivers are subject to severe flooding and erosion. Most of Alaska's Native villages are located on the coast or on riverbanks.

Government Accountability Office Report 04-142

In 2003, Congress directed the Government Accountability Office (GAO) to study Alaska Native Villages affected by flooding and erosion to determine the extent to which these communities were affected, what state and federal programs were available to address flooding and erosion in these communities, the status of efforts to address flooding and erosion, and what Congress might do in the future to address these issues. The report found that 184 out of 213, or 86 percent, of Alaska Native villages are affected by flooding and erosion to some extent. The report found that while many of the problems in these communities are long-standing, various studies indicate that coastal villages are becoming more susceptible to flooding and erosion due in part to rising temperatures.

In addition, the amount and accuracy of floodplain information in Alaska varies widely from place to place. Detailed floodplain studies have been completed for many of the larger communities and for the more populated areas along some rivers. For example, the Federal Emergency Management Agency (FEMA) has published Flood Insurance Rate Maps that show floodplain boundaries and flood elevations for communities that participate in the National Flood Insurance Program. However, because only a handful of Alaska Native villages participate in the program, many of the villages have not had their 100-year floodplain identified by FEMA. In addition, little or no documented floodplain information exists for most of the smaller communities. Moreover, no consolidated record has been maintained of significant floods in Alaska Native villages. The Corps' Flood Plain Management Services has an ongoing program to identify the 100- year flood elevation, or the flood of record of flood-prone communities through data research and field investigations.

Congress directed the GAO to focus on nine coastal and riverine communities affected by annual and episodic flooding and erosion: Kaktovik, Barrow, Point Hope, Kivalina, Shishmaref, Koyukuk, Unalakleet, Newtok and Bethel. Of these communities, four – Kivalina, Koyukuk, Newtok, and Shishmaref - were identified as being in imminent danger from flooding and erosion and were making plans to relocate.



Government Accountability Office Report 09-551

In 2009, GAO further reviewed the progress of the 31 villages threatened by flooding and/or erosion that will impact the long-term viability of the community. Twenty-eight of the 31 communities are incorporated; three are unincorporated. This list includes the following incorporated communities: Akiak, Alakanuk, Allakaket, Barrow, Chefnak, Chevak, Clark’s Point, Eyak (Cordova), Deering, Dillingham, Emmonak, Golovin, Hughes, Huslia, Kivalina Kotlik, Koyukuk, McGrath, Napakiak, Nulato, Nunapitchuk, Port Heiden, Saint Michael, Selawik, Shaktoolik, Shishmaref, Teller, and Unalakleet. The list also includes the following unincorporated villages: Kwigillingok, Lime Village, and Newtok.

The GAO divides threatened communities into three categories based on relocation actions or intentions: 1) likely to move all at once; 2) likely to gradually migrate to a new location over time; and 3) not exploring immediate relocation. The three incorporated communities identified as “likely to move all at once” include Shishmaref, Kivalina, and Shaktoolik (Table 14). These communities are under threat by coastal storm surge, which has been eroding shoreline and destroying or threatening infrastructure. Anecdotally, the winter ice pack that protected these communities has been forming later and melting earlier in recent years. This has resulted in an increase in the eroding effects of the coastal storm surges. These are the most critical of the endangered communities and are furthest along in addressing their situation.

Hughes, Unalakleet, Koyukuk, Nulato, Golovin, Allakaket, Huslia, and Teller are classified in the report as “likely to gradually migrate to new location over time” (Table 14). These are both coastal and riverine communities and are victim to either river erosion or severe coastal storm surge.

Table 13: Community Relocation Status

Status	Frequency	Percent
Likely to Move all at Once	3	2%
Likely to Gradually Migrate to New Location Over Time	8	5%
Not Exploring Immediate Relocation	17	93%
Total	28	100%

**Table 14: Imminently Threatened Communities**

Village	Likely to Move all at Once	Likely to Gradually Migrate to a New Location Over Time	Not Exploring Immediate Relocation	NFIP Participant
Akiak			✓	
Alakanuk			✓	
Allakaket		✓		
Barrow			✓	
Chefornak			✓	
Chevak			✓	
Clark's Point			✓	
Eyak (Cordova)			✓	✓
Deering			✓	
Dillingham			✓	✓
Emmonak			✓	✓
Golovin		✓		
Hughes		✓		
Huslia		✓		
Kivalina	✓			
Kotlik			✓	
Koyukuk		✓		✓
Kwigillingok*				
Lime Village*				
McGrath			✓	✓
Napakiak			✓	
Newtok*				
Nunapitchuk			✓	
Port Heiden			✓	
Saint Michael			✓	
Selawik			✓	
Shaktoolik	✓			
Shishmaref	✓			✓
Teller		✓		
Unalakleet		✓		
Total	3	8	17	6



Incorporated communities identified by GAO as “not exploring immediate relocation” include Akiak, Alakanuk, Barrow, Chefnak, Chevak, Clark’s Point, Eyak (Cordova), Deering, Dillingham, Emmonak, Kotlik, McGrath, Napakiak, Nunapitchuk, Port Heiden, Saint Michael, and Selawik (Table 14).

Of noteworthy importance, many other communities in Alaska have flooding and erosion impacts: however, these 28 incorporated and 3 unincorporated communities are identified as the most heavily impacted by the GAO. Furthermore, only six communities are also NFIP participants including Cordova, Dillingham, Emmonak, Koyukuk, McGrath, and Shishmaref.

RECORDED FLOODS

The U. S. Army Corps of Engineers (USACE), Alaska District, Floodplain Management Services publishes flood hazard and floodplain information with the goal of reducing the threat to life from flooding in Alaska and minimizes flood-caused economic losses. This information is also intended to aid federal, state and local agencies in guiding development in the communities. Federal agencies and many state and local authorities require new buildings to be built outside the floodplain if practical, or to have the first floor elevated above the 100-year flood level if the building is located in a floodplain.

Table 15: Communities with Floods Occurring - Alaska

	Communities	Percent	Cumulative Percent
Flood in Community	83	51%	51%
No Flood in Community	69	42%	93%
NA	11	7%	100%
Total	163	100%	

The most recent floods recorded were in 2009. They were caused by ice jams during breakup on the Yukon and Kuskokwim Rivers. The earliest recorded for this database were 1913 floods caused by a storm surge in Teller, Golovin, and Koyuk in Norton Sound. The historic record data available shows that many communities in Alaska have had floods in the past. A “Most Recent Flood” event was recorded for 66 Communities, a ‘Flood of Record’ was identified for 49 communities, and 32 communities recorded a ‘Worst Flood Event on Record’. 83 communities had a flood recorded. Common causes of riverine flooding were “ice jam” or “rainfall” while for coastal areas ‘coastal storm surge’ was listed as a common cause. This is not a complete record of floods in Alaska despite the efforts of the Corps to make it so.

Unfortunately, in Alaska small populations, remote locations, and high costs make data collection in many areas of the State difficult. Recording flood information is no exception.



The most information is known about the 31 active NFIP communities (out of 164 Alaska organized communities) which represent almost 90% of Alaska's population. Historic flood information is somewhat inconsistent as well, more is known about recent floods than past floods. Often, only the more severe floods were recorded in the past - especially in rural areas. Other data in the report included 'Recommended Building Base Elevation', 'Flood Plain Report', 'Flood Insurance Study' and 'Flood Gauge'.

Table 16: Table Attributes of Flood Data Reported

Variable	Yes	No	DK	% Yes
Recommended Building Base Elevation*	40*	123	-	28%
Flood Plain Report	34	85	44	21%
Flood Insurance Study	32	114	17	17%
Flood Gauge	24	125	14	15%
*Yes means a Recommended Building Base Elevation was reported				

The Recommended Building Base Elevation is the recommended elevation of the bottom of the first floor of a building. (This is a recommendation by the Alaska District, Corps of Engineers. "The Corps does not regulate the flood plain; participating communities may have different requirements").

Flood Plain Reports are done by the U.S. Army Corps of Engineers, Alaska District, and the Federal Emergency Management Agency for various communities in Alaska to determine attributes of the flood plain situation in that area. A Flood Insurance Study is "an engineering study performed by FEMA to identify flood-prone areas, insurance risk zones, and other flood data within a community." A Flood Gauge is a one-foot by eight-foot staff gauge typically placed in a prominent place within the community and meant to function during severe floods. It often has attached plaques that indicate the elevation of community buildings, the flood of record, and the Recommended Building Elevation".



ALASKA VILLAGE EROSION TECHNICAL ASSISTANCE PROGRAM

The Alaska Village Erosion Technical Assistance Program (AVETA) responded to legislation that directed the U.S. Army Corps of Engineers (USACE) to investigate issues surrounding erosion at several Alaska Native villages. As part of this effort, the Corps examined erosion rates and control, potential relocation, and impacts to Alaska Native culture and tradition.

The final AVETA report documented the responses to questions raised in the Consolidated Appropriations Resolution, 2003 PL 108-7, Division D - Energy and Water Development Appropriations, 2003, Conference Report (H.R. 108-10, page 807), Senate Report (S.R. 107- 220, page 23), and HR 108-357, Section 112, page 10, Conference Report Energy and Water Development Appropriations Bill, 2004 with regards to the communities of Bethel, Dillingham, Kaktovik, Kivalina, Newtok, Shishmaref, and Unalakleet.

The questions asked were: what are the costs of ongoing erosion, what would it cost to relocate a community, and how much time do these communities have left before they are lost to erosion. The following table summarizes the answers to these questions.

Community	Costs of Future Erosion Protection	Cost to Relocate	How Long Does the Community Have*
Bethel	\$5,000,000	N/A	> 100 years
Dillingham	10,000,000	N/A	> 100 years
Kaktovik	40,000,000	\$ 20 – 40 Million	> 100 years
Kivalina	15,000,000	\$ 95 – 125 Million	10 – 15 years
Newtok	90,000,000	\$ 80 – 130 Million	10 – 15 years
Shishmaref	16,000,000	\$100 – 200 Million	10 – 15 years
Unalakleet	30,000,000	N/A	> 100 years

*These numbers assume no future erosion protection, including that listed here, is not implemented.



ALASKA BASELINE EROSION ASSESSMENT

Erosion is a major problem for many Alaska communities. In 2005, the USACE conducted a Baseline Erosion Assessment (BEA) of all communities in Alaska. The aim was to coordinate, plan, and prioritize appropriate responses to erosion throughout Alaska. The Corps identified 178 Alaska communities as having reported erosion problems. One hundred five of these were incorporated communities and are discussed here. Erosion is not to be equated with flooding. While erosion and flooding are often related issues, flooding has distinct attributes that are not related to erosion. Erosion is the subject of the Corps study.

Table 17: Erosion Assessment of Alaska Communities

Erosion for Communities Assessment	# Communities	%	% Alaska's Population
Priority Action Community	23	14%	3%
Monitor Conditions Community	41	25%	7%
Minimal Erosion Community	41	25%	56%
No Identified Erosion Issues	47	29%	(All other) 34%
Not rated	11	7%	
Total	163	100%	100%

After a research and analysis process the Corps designated three levels of community erosion status; (A) “Priority Action Communities” (N=23)—indicating a need for immediate and continuing attention to erosion issues. (B) “Monitor Conditions Communities.” (N=41) – meaning erosion problems are present but not significant enough to require immediate action and (C) “Minimal Erosion Communities.” (N=41) – In these communities erosion was identified as minor and no change was expected in the foreseeable future. Forty seven communities with no erosion history were not rated.

The Priority Action Communities represent about 2.6% of Alaska’s population while the Monitor Conditions Communities make up about 7.3% of the population with the Minimal Erosion Communities having about 56% of Alaskans.

**Table 18. Declared Flood Disasters: 2000 to 2009**

Year	Date	Disaster Types	Active Disaster	Number
2009	12/18	Severe Storms, Flooding, Mudslides and, Rockslides	1,865	
2009	06/11	Flooding and Ice Jams	1,843	
2008	09/26	Severe Storms, Flooding, Landslides, and Mudslides	1,796	
2006	12/08	Severe Storms, Flooding, Landslides, and Mudslides	1,669	
2006	10/16	Severe Storms, Flooding, Landslides, and Mudslides	1,663	
2006	08/04	Snow Melt and Ice Jam Flooding	1,657	
2005	12/09	Severe Fall Storm, Tidal Surges, and Flooding	1,618	
2005	03/14	Severe Winter Storm		1,584
2004	11/15	Severe Winter Storm Tidal, Surges and Flooding	1,571	
2003	04/26	Winter Storm		1,461
2002	12/04	Winter Storms		1,445
2002	06/26	Flooding		1,423
2000	02/17	Winter Storms And Avalanches	1,316	

This Table shows the number of communities experiencing a declared flooding disaster since 2000.

Table 19. Number of FEMA Declared Flood Disasters Since 2000

# Disasters in Community	# Communities	%	Cumulative %
3	27	17%	17%
2	40	24%	41%
1	28	17%	58%
0	68	42%	100%
Total	163	100%	

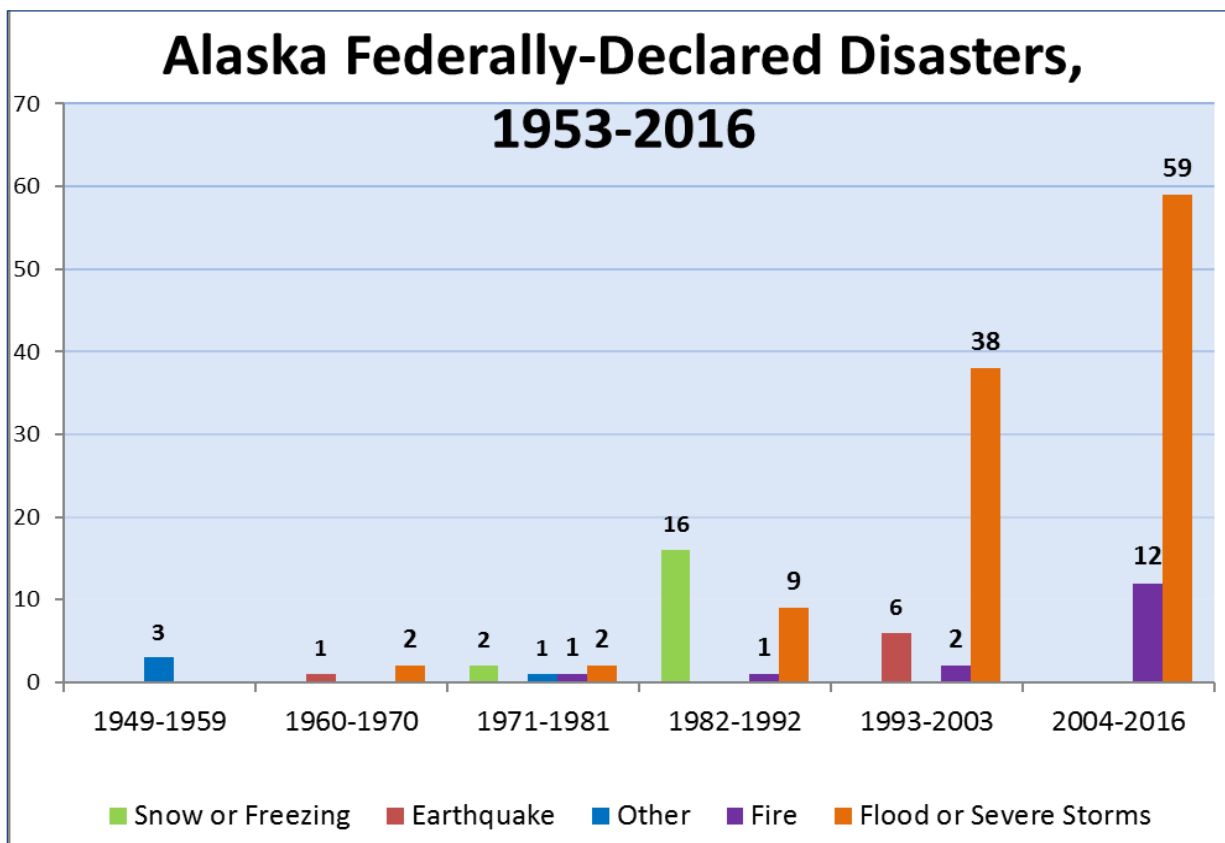
A federal emergency is declared when, in a formal process, it is decided that the State and local governments are unable to deal with the disaster at hand and federal assistance is warranted. FEMA coordinates this federal response. Thirteen such disasters with a flooding component have occurred since 2000. Fifty eight percent of Alaska's organized communities experienced at least one of these emergencies. Sixteen percent or 27 organized communities experienced three emergencies.



Risk Mapping, Assessment and Planning: Assisting Alaska Native Villages

Over the last several decades, the number of presidentially-declared disasters in Alaska has increased dramatically, as illustrated in Figure 1, below¹. The majority of these disasters are caused by flooding associated with severe storms. Over the past decade, most of these events have occurred in the Bethel and Yukon-Koyukuk census areas (see Figure 2). Both census areas are comprised of small, remote, predominantly Alaska Native communities. These communities are especially vulnerable because both census areas are part of Alaska's vast unorganized borough where there is no borough form of government to provide services and other resources to address disaster events. Only six of the 68 Alaska Native villages within these two census areas participate in the National Flood Insurance Program (NFIP).² Half of the villages within these census areas are ineligible to participate in the NFIP because they are not incorporated municipalities³. Storm events are increasingly putting these communities at risk to loss of life and property. Recent studies indicate that the frequency and intensity of these storms is likely to increase, especially in western Alaska.⁴

Figure 5: Alaska Federally Declared Disasters, 1953-2016



¹ Data acquired from <http://www.fema.gov/disasters/grid/state-tribal-government/86>

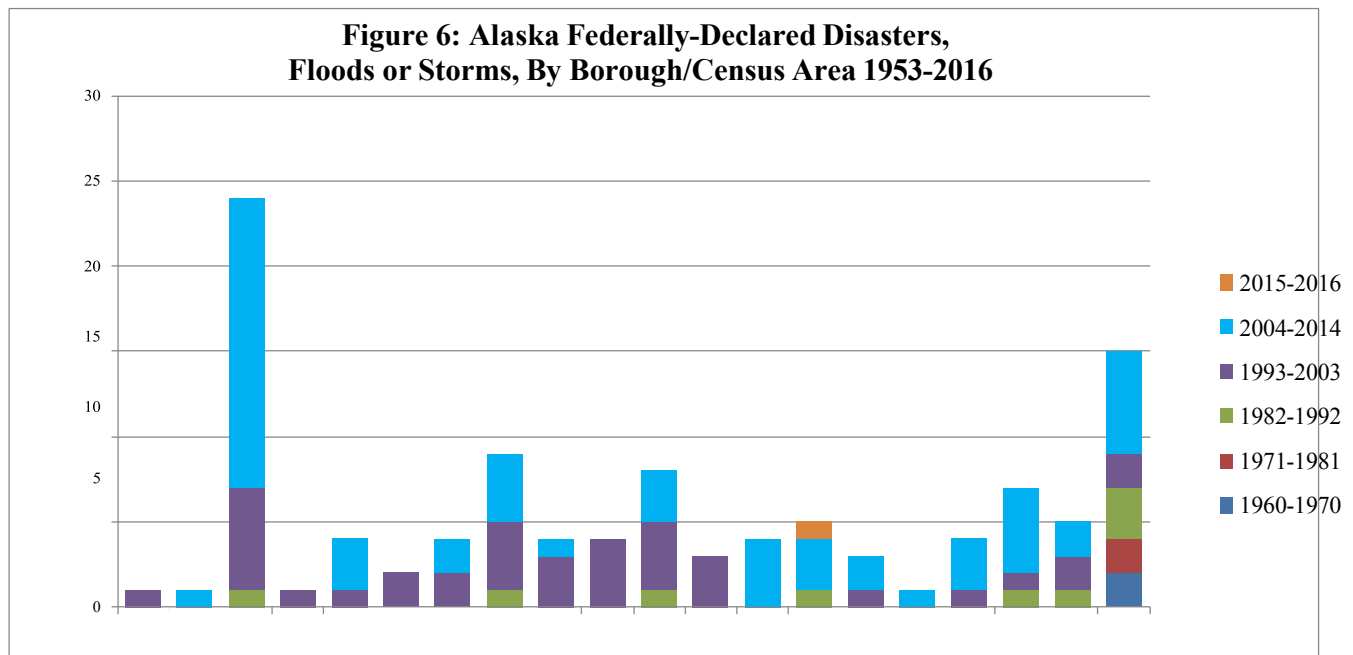
² The six communities are Aniak, Bethel, Kwethluk, Galena, McGrath and Nenana.

³ To participate in the NFIP, communities agree to enforce regulations for land use and new construction in high-risk flood zones. In Alaska, municipal incorporation is required for land use regulation.

⁴ Terenzi, John; Ely, Craig R.; Jorgenson, M. Torre (2014): Storm-surge flooding on the Yukon-Kuskokwim Delta, Alaska. In Arctic 67 (3), pp. 360–374. DOI: 10.14430/arctic4403. See also: <http://arctic.journalhosting.ucalgary.ca/arctic/index.php/arctic/article/view/4403>



State and Federal agencies have been concerned about the impact of flooding and other natural hazards on the safety and viability of Alaska Native communities for some time. This briefing paper summarizes some of these efforts, including key observations and needs identified by prior efforts. The paper also looks at ways in which the tools, resources and technical assistance offered through FEMA's Risk Mapping, Assessment and Planning (Risk MAP) Program could enhance local understanding of risk in Alaska Native villages and inform local decisions to take action to increase disaster resilience in these communities. Understanding risk and having reliable data from which to make informed decisions to take action to reduce or mitigate risk are crucial to community-driven efforts to increase disaster resilience.



Efforts to Assist Alaska Native Villages with Flooding, Erosion and Other Hazard Issues

A number of efforts have taken place to address severe flooding, erosion and other natural hazards in Alaska's rural communities. Several key observations and needs have been identified through these efforts:

- Assistance to imperiled communities should be based on a fair and defensible methodology which prioritizes communities by level of threat and need
- The community must be a key player in the decision-making process
- Imperiled communities (and the agencies assisting them) need quantifiable data from which to make informed decisions
- A coordinated, interdisciplinary approach to address community threats is essential to increasing community resilience



STATE OF ALASKA EFFORTS IN THE 1980s

In 1982, the Alaska Department of Community and Regional Affairs⁵ prepared a report, “*A Listing of Alaskan Communities for documentation of Erosion Problems*”⁶. Although the report was not specific to Alaska Native villages, 68% (169 of 248) of the communities identified as impacted by erosion and flooding were Alaska Native villages.⁷ In 1983, an Erosion Control Task Force was appointed by the State of Alaska to investigate and inventory potential erosion problems on a statewide basis, to prioritize the erosion problem sites by severity and need, and to provide preliminary design plans where immediate remedial action is required⁸. Sites were rated based on public safety, public property, private property, time of projected loss, ability to move, approximate replacement value, and economic value.

2003 U.S. GOVERNMENT ACCOUNTABILITY OFFICE (GAO) STUDY

In 2003, Congress directed the GAO to study Alaska Native villages affected by flooding and erosion and to 1) determine the extent to which these villages are affected, 2) identify federal and state flooding and erosion programs, 3) determine the current status of efforts to respond to flooding and erosion in nine villages, and 4) identify alternatives that Congress may wish to consider when providing assistance for flooding and erosion. GAO was directed to focus in particular on six villages - Barrow, Bethel, Kaktovik, Kivalina, Point Hope, and Unalakleet. Based on recommendations of State of Alaska and federal officials, GAO added the villages of Koyukuk, Newtok, and Shishmaref.⁹

GAO reported that most of Alaska’s more than 200 Alaska Native villages were affected to some degree by flooding and erosion, most commonly caused by severe storm events on Alaska’s coastline or by river flooding, such as during the spring breakup of river ice. GAO identified 213 Alaska Native Villages.¹⁰ Of these 213 communities, GAO found that **184 villages, or 86 percent**, were affected to some extent by flooding and erosion. Of the nine focus villages, GAO found four to be in imminent danger from flooding and erosion and making plans to relocate (Kivalina, Koyukuk, Newtok and Shishmaref).

GAO identified several issues that created impediments to Alaska Native villages receiving assistance:

⁵ Now Alaska Department of Commerce, Community, and Economic Development (DCCED)

⁶ State of Alaska, Department of Community and Regional Affairs, *A Listing of Alaskan Communities for Documentation of Erosion Problems*, Prepared by Woodward-Clyde Consultants (Anchorage, Alaska: September 1982).

⁷ These 169 communities were included in the 213 Alaska Native villages GAO identified in 2003

⁸ State of Alaska, Department of Transportation & Public Facilities, *Task Force on Erosion Control Final Report*, Prepared by J.J. Simpson (Alaska: January 1984).

⁹ GAO, *Alaska Native Villages: Most Are Affected by Flooding and Erosion, but Few Qualify for Federal Assistance*, [GAO-04-142](#) (Washington, D.C.: Dec. 12, 2003).

¹⁰ GAO defined an Alaska Native village as a village that (1) was deemed eligible as a Native village under the Alaska Native Claims Settlement Act and (2) has a corresponding Alaska Native entity that is recognized by the Bureau of Indian Affairs. On the basis of these criteria, 213 Alaska Native villages were identified. A listing of the 213 Alaska Native villages is provided in Table 1, beginning on page 10.



- It was difficult to assess the severity of erosion and flooding issues because **quantifiable data are not available** for remote locations.
 - ◊ Because only a handful of Alaska Native villages participate in the NFIP, the floodplain hasn't been mapped for most of these communities.
- Many Alaska Native villages are small, remote, and have a subsistence lifestyle. They often lack the resources to respond to flooding and erosion on their own.
- Small and remote Alaska villages often fail to qualify for assistance under Federal programs because they do not meet the program's criteria; in particular, the cost-benefit requirements
- Even villages that do meet the cost/benefit criteria of Federal programs may still fail to qualify for assistance if they cannot provide or find sufficient funding to meet the cost-share requirements for the project.

2007 – 2011 STATE OF ALASKA IMMEDIATE ACTION WORK GROUP

In September 2007, Alaska's Governor established the Climate Change Sub-Cabinet to lead the preparation and implementation of an Alaska climate change strategy. Within the sub-cabinet, an Immediate Action Work Group (IAWG), an interdisciplinary, interagency working group, was created for the early assessment and development of an action plan addressing climate change impacts on coastal and other vulnerable communities in Alaska. The IAWG was tasked with identifying the short-term, emergency actions the State of Alaska needed to take to prevent loss of life and property in imminently-threatened communities.

Using the 2003 GAO report as guidance, the IAWG focused on six imminently threatened communities – Kivalina, Koyukuk, Newtok, Shaktoolik, Shishmaref and Unalakleet.¹¹

In its second report (2009) to the Sub-Cabinet, the IAWG called for immediate steps to *“identify communities at risk, timeframe, and true needs to address climate change impacts,”* and to prioritize *“needs based on risks to lives, health, infrastructure, homes, businesses, subsistence harvests, significant cultural attributes, and the quality of life.”*¹²

The IAWG stressed that informed decisions made by imminently-threatened communities required substantial coordination and ***the identification, collection and analysis of data to make the most effective decisions for long-term viability and sustainability of imminently-threatened communities.***

¹¹ The IAWG arrived at these villages using the GAO-04-142 report, which identified 9 highly threatened communities (Shishmaref, Newtok, Kivalina, Koyukuk, Unalakleet, Barrow, Bethel, Kaktovik, and Point Hope). Based on meetings held in Fairbanks and Anchorage, Alaska November 6, 2008 and November 19-20, 2008, the list was shortened to the communities of Shishmaref, Newtok, Kivalina, Koyukuk, and Unalakleet and the village of Shaktoolik was added.

¹² Immediate Action Work Group, ***Recommendations Report to the Governor's Subcabinet on Climate Change***, March 2009.



One of the final tasks the IAWG attempted to address before it disbanded in 2011 was to develop a methodology for prioritizing Alaska’s imminently threatened communities based on level of threat and need. The 2009 report provided suggestions for potential metrics for this prioritization.

2009 ALASKA BASELINE EROSION ASSESSMENT

Based on the findings of a 2004 federal field hearing on the impacts of severe erosion and flooding on Alaska Native villages, Congress directed the U.S. Army Corps of Engineers (USACE) to conduct an Alaska erosion baseline study to coordinate and plan the appropriate responses and assistance for Alaska villages in the most need and to provide an overall assessment on the priority of which villages should receive assistance. Because the USACE lacked authority to assess flooding threats, a baseline assessment of erosion threats, only, was conducted and flood was not considered.

The USACE found that 178 communities reported erosion problems. Twenty-six communities were classified as “Priority Action Communities” to be considered for immediate action by either initiating an evaluation of potential solutions or continuing with ongoing efforts to manage erosion. Sixty-nine communities were identified as “Monitor Conditions Communities”, where erosion problems are present but not significant enough to require immediate action. Eighty-three communities were designated “Minimal Erosion Communities”, in which minimal erosion-related damages were reported or would not be expected in the foreseeable future.

2009 FOLLOW-UP GAO REPORT

Prompted by concerns of State of Alaska officials regarding the growing impacts of climate change on erosion and flooding in Alaska Native villages, in 2009 Congress directed GAO to follow up on the 2003 report, to address: 1) the flooding and erosion threats that Alaska Native villages currently face, 2) the federal programs that are available to assist villages facing potential disasters, 3) the status of village relocation efforts, and 4) how federal assistance to relocating villages is prioritized.¹³

The 2009 study identified 31 villages (see Figure 3 on page 9) located throughout the state of Alaska’s river and coastal areas, which are imminently threatened by flooding and erosion.

Twenty-six of the imminently threatened villages were identified as Priority Action Communities in the USACE Alaska Baseline Erosion Assessment. GAO included five additional imminently threatened villages (Allakaket, Hughes, Koyukuk, Nulato, and Teller) based on the 2003 study and the work of the IAWG.

Of these villages, 12 were exploring relocation options for all or a portion of the existing villages. Four of the 12 communities – Kivalina, Newtok, Shaktoolik and Shishmaref – were identified as needing to move the entire community as soon as possible.

¹³GAO, *Alaska Native Villages: Limited Progress Has Been Made on Relocating Villages Threatened by Flooding and Erosion*, GAO-09-551 (Washington, D.C.: June 2009).



DENALI COMMISSION ENVIRONMENTALLY THREATENED COMMUNITIES PROGRAM

In September 2015, President Obama designated the Denali Commission as the lead federal agency for coordinating federal efforts to mitigate the impacts of erosion, flooding and permafrost degradation in rural Alaska.

In order to fulfill this role, the Commission established the Environmentally Threatened Communities Program. The commission used GAO-09-551 as guidance to for identifying environmentally-threatened communities, specifically the 31 imminently threatened communities identified by GAO. A primary focus of the program has been to fund specific projects in the four communities identified by GAO as needing to relocate as soon as possible – Kivalina, Newtok, Shaktoolik and Shishmaref. The program also designates a statewide Disaster Response Fund for the remaining 27 communities identified by GAO as imminently threatened.

To determine how assistance would be provided to the remaining 27 communities, Commission staff proposed the development of a general Community Prioritization Methodology based on the threats due to erosion, flooding and permafrost degradation. This was basically the method sought by the IAWG to identify communities based on level of threat and need. The Commissioners did not agree to fund the prioritization effort.

How Risk MAP Can Provide Assistance

FEMA's Risk MAP Program could address many of the needs identified for Alaska Native villages by the efforts discussed above. The following section reviews these observed needs (listed on page 2) and the role Risk MAP can play:

- *Assistance to imperiled communities should be based on a fair and defensible methodology which prioritizes communities by level of threat and need*

The IAWG and the Denali Commission proposed but never completed efforts to develop prioritization methodologies based on threats and needs of Alaska Native villages.

Prioritization is the first step in the Risk MAP process. States are asked to develop a quantitative approach to prioritize communities to determine which communities FEMA will study. The State of Alaska developed a prioritization methodology to guide the study of NFIP-participating communities in Alaska. A similar approach could be taken to prioritize imminently-threatened Alaska Native villages based on level of threat and need.

There is data on which to base this prioritization. The Alaska Baseline Erosion Assessment still serves



as a good source of prioritization of communities based on erosion threats. The USACE has developed a flood hazard database that catalogs floods throughout the state. The first phase was dedicated to researching hazard mitigation plans, ice jam databases, disaster declarations and indices, and other publically available flood records. All data is searchable by community name and flood year. This data should lend itself well to a prioritization of flood hazards. In addition, the Alaska Division of Geological and Geophysical Surveys (DGGS) has been processing and compiling the baseline data necessary to include coastal hazards in the decision making/prioritization process. In 2010, the IAWG funded the *Imperiled Communities Water Resources Analysis* which provided a cursory evaluation of the climate-related risks (primarily flooding and erosion) associated with 214 communities eligible for funding by the Alaska Department of Environmental Conservation (ADEC) Village Safe Water (VSW) Program. From this broad master list of communities, 26 communities were initially identified and designated as the study group. Based on this analysis, a study group of 25 communities (all Alaska Native villages) was identified as likely to face near-term climate change related impacts to their water and wastewater infrastructure.

- *The community must be a key player in the decision-making process*¹⁴

This may seem obvious, but ensuring community involvement in the process is not always easy to do. Risk MAP's Discovery Process provides a perfect time to engage the community and establish a relationship with local leadership. Variations of the Discovery Interview and Discovery Meeting could be developed to better meet the needs of Alaska Native villages. DCRA has long experience with working with Alaska's small rural communities and has many resources that could be drawn on.

- *Imperiled communities (and the agencies assisting them) need quantifiable data from which to make informed decisions*

It is very difficult for a community to know how to respond to environmental threats without clear understanding and guidance on the nature of the threat, what the current and predicted impacts are, and what options there are to address the threat. Alaska Native villages that have made decisions about how to respond to environmental threats have relied upon studies of the threats to provide this guidance. For example, the village of Newtok made its decision to relocate based on an erosion assessment that was conducted in the community in the early 1980s.¹⁵

14 The State Division of Community and Regional Affairs (DCRA) was able to ensure this involvement by providing grant funding to a local community coordinator for the villages of Newtok, Kivalina, Shaktoolik, and Shishmaref with the engagement of inter-agency working groups and the development of Strategic Management Plans for each community. The Denali Commission has taken over the funding of these local coordinators.

15 City of Newtok, Alaska. *Ninglick River Erosion Assessment*, Addendum. Prepared by Woodward-Clyde Consultants, November 29, 1984.



In 2008-2011, the State of Alaska administered the Alaska Climate Change Impact Mitigation Program to support the imminently-threatened communities the IAWG was working with. The first step of the program was to provide funding to the community to conduct a Hazard Impact Assessment to identify the nature of the environmental threat, establish current and predicted impacts, and provide recommendations to the community on alternatives to address the impact. This was seen as a critical first step in the community decision-making process.

Risk MAP provides similar information to a community through the acquisition of high-quality data to identify risks and to enable better risk assessments. FEMA's risk assessments provide the community with the information and tools needed to understand risk and to make informed decisions about future actions. Many of the non-regulatory tools and products of Risk MAP could enhance the local decision-making process.

- *A coordinated, interdisciplinary approach to address community threats is essential to increasing community resilience*

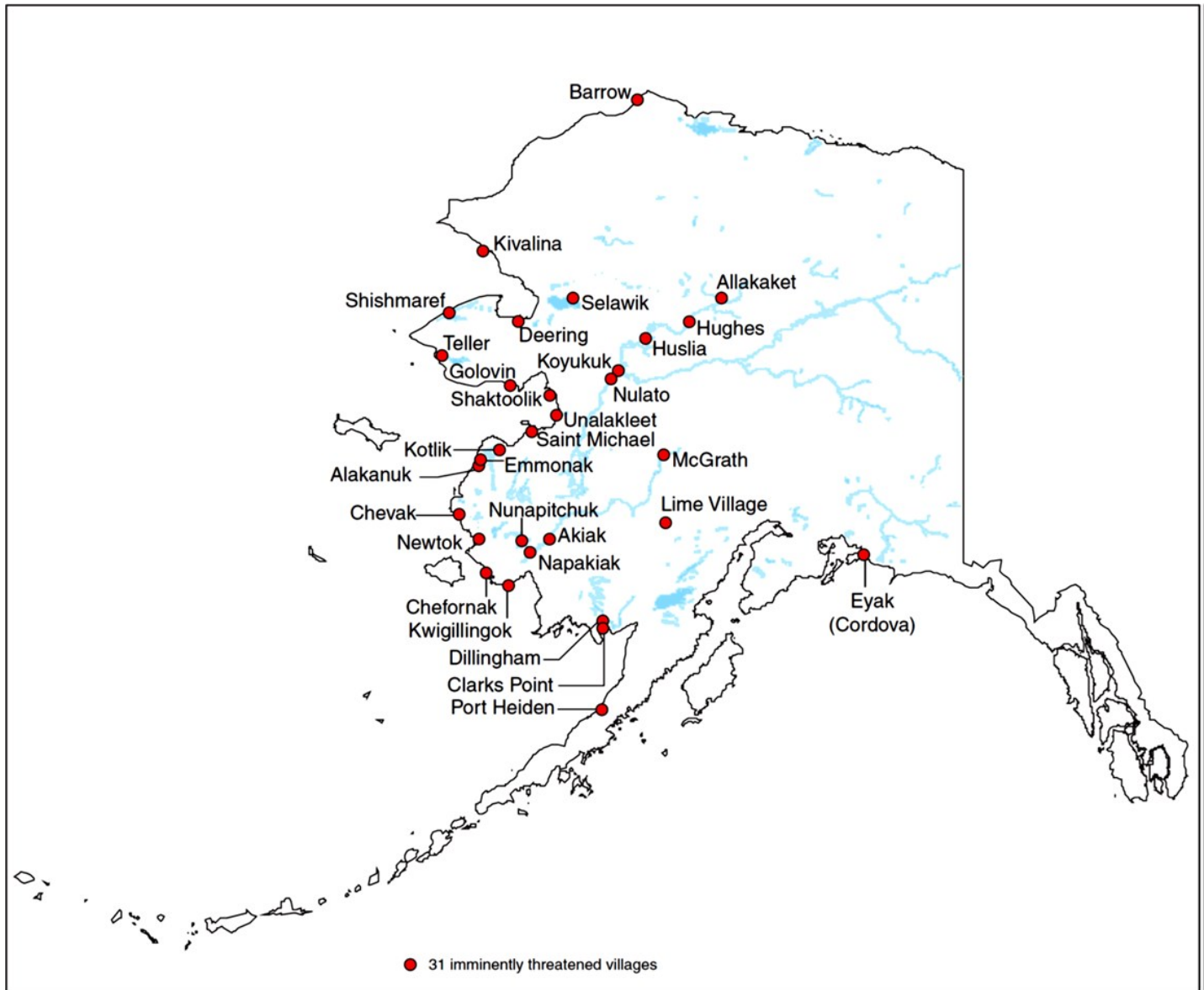
The IAWG's first step to addressing the need of imperiled communities was, ***“Begin by developing a collaborative organizational structure that can focus the combined capabilities of local, regional, state, and federal stakeholders on the problems at hand ... Team work is essential. Relying on one agency to carry out the mission risks both waste and lack of action.”***¹⁶

Interagency coordination is basic to the Risk MAP process, which relies upon partnerships between federal, state, tribal and local government stakeholders. The State of Alaska Risk MAP Coordinator has organized and facilitated interagency working groups (also known as village planning groups) over the past decade for the communities of Newtok, Kivalina, Shaktoolik and Shishmaref. DCRA, the agency responsible for coordinating the State of Alaska's Risk MAP Program, is tasked by two State of Alaska Administrative Orders (AO 231 and AO 239) *“to act as the state coordinating agency to coordinate with the other state and federal agencies to propose long-term solutions to the ongoing erosion issues in... affected coastal communities...”*

¹⁶ Immediate Action Work Group, ***Recommendations Report to the Governor's Subcabinet on Climate Change***, Final Report, April 17, 2008.



Figure 7: Thirty-one Imminently-Threatened Alaska Native Villages Identified by GAO



Sources: GAO (analysis); Pitney Bowes Business Insight (map).



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APPENDIX 5: OTHER MAPPING, RISK ASSESSMENT AND RESILIENCE PLANNING RESOURCES IN ALASKA

MAPPING EFFORTS



DCRA Community Profile Maps

Maps are a critical tool for developing community plans, planning infrastructure projects, and clarifying land title challenges that may impede economic development projects. In the late 1970's and early 1980's, DCRA community profiles were well-known and widely used. In many communities, they are still the most recent map.

Around 2001–2002, as discussions took place among representatives of state and federal agencies as part of the Denali Commission's governmental coordination efforts, it was recognized: 1) well-planned infrastructure projects require *“current, complete, and accurate community maps”*; and 2) a considerable amount of money was being spent on mapping on a project-specific basis, with the resulting maps in some cases not licensed for other uses, not available to the public, or not covering a large enough area to be useful for other projects.

It was also recognized small and rural communities in the unorganized borough generally lack the financial capital and the technical expertise to develop new maps on their own. The IAID (Initiative for Accelerated Infrastructure Development) program was designed to provide technical assistance and matching funds to local partners for projects to develop new maps for groups of six to twelve communities. IAID recognizes the development of community profile maps need not create a new government program; rather, the mapping program should result from federal, state, regional and local government coordination. Consequently, agencies worked together to develop a set of mapping standards that would serve the needs of multiple users.

DCRA staff provides technical assistance to local partners in planning projects, in preparing an RFP and evaluating proposals to ensure the local partner is entering into a contract that will provide the desired products, and in monitoring the contractor's performance. The Denali Commission, Alaska Department of Transportation and Public Facilities, United States Department of Agriculture - Rural Development, and Alaska Department of Commerce, Community, and Economic Development have provided funds for



matching grants to the local partners, to cover approximately half the cost of the mapping contract. By 2002, it was estimated that about 200 target communities needed comprehensive land use maps, including incorporated and unincorporated communities. “Target community” was defined as a community with less than 1,500 in population and not in a borough with mapping capability. The objective of the program was to map communities that would otherwise have a very difficult time getting the funding for a community map. More recently, communities within rural boroughs have been mapped.

Community profile maps are based on rectified digital aerial photography, and display such mapping attributes as topography at two foot contour intervals, property boundaries, utilities, public and private improvements, easements, and additional land use information. They are widely used as base maps for GIS applications, and have also been used for hazard mitigation planning, community planning, flood inundation mapping, and identification of land uses and environmentally-sensitive areas.

To date, every census area within Alaska’s Unorganized Borough has been mapped, with some or all communities receiving maps within these areas. In addition, a large number of the communities within Alaska’s rural boroughs have been mapped. Table 20, below, provides some examples of the partners that have funded Community Profile Maps.

The maps are available online in an interactive format at <http://dccc.maps.arcgis.com/home/index.html>

Table 20: Examples of Community Profile Mapping Partners

Program Partner	Partner	Percent	Cumulative Percent
No Community Profile Mapping	70	43%	43%
Aleutian/Pribilof Islands Association	3	2%	45%
Aleutians East Borough	5	3%	48%
Association of Village Council Presidents	7	3%	52%
Bristol Bay Native Association	6	4%	56%
Coastal Villages Region Fund	11	8%	63%
Interior Region Housing Authority*	15	9%	72%
Kawerak, Inc.	15	9%	81%
Kodiak Island Housing Authority	5	3%	84%
Lake and Peninsula Borough	6	4%	88%
Tlingit-Haida Regional Housing Authority	10	6%	94%
Yukon Delta Fisheries Development Association	10	6%	100%
Total	163	100%	



MAPPING PROJECTS FUNDED THROUGH THE COASTAL IMPACT ASSISTANCE PROGRAM

The Coastal Impact Assistance Program (CIAP) was authorized by the Energy Policy Act of 2005 (Public Law 109-58). Section 384 of the Act authorizes funds to be distributed to Outer Continental Shelf (OCS) oil and gas producing states to mitigate the impacts of OCS oil and gas activities.

Alaska was one of six states eligible to receive CIAP funding. Of the \$79,407,444 in CIAP funds allocated to Alaska, 65% of the total allocation went to the State of Alaska, and the remaining 35% went to Coastal Political Subdivisions (CPS) of the State, boroughs located within 200 nautical miles of OCS activity. There are eight CPSs in Alaska, six which participate in the NFIP: Municipality of Anchorage, Bristol Bay Borough, Kenai Peninsula borough, Kodiak Island Borough, Lake and Peninsula Borough, Matanuska-Susitna Borough, North Slope Borough, and Northwest Arctic Borough.

A number of mapping projects were conducted using Alaska's CIAP funds. Many of these projects have the potential to interface with FEMA Risk MAP projects and products:

Aerial Photography/Satellite Imagery of the Kenai Peninsula Borough

This project resulted in high-resolution satellite imagery and digital maps of the Kenai Peninsula Borough coastline up to 1,000 ft. elevation. The imagery was combined with base map data, elevation models, and other existing data layers to produce maps on paper and has been posted on the Kenai Peninsula Borough's Internet map service. Map data is accessible to everyone via the Web. Paper maps have been made available upon request to the public and other governmental agencies. Raw image data is available to contributing participants named in the contract for image acquisition. New image data has proven to be a good fit for the recently acquired LIDAR elevation model. New imagery is useful for other purposes, such as for updating the Borough's Emergency Services Map Books.

Floodplain Development Survey Benchmarks – Kenai Peninsula Borough

This project identified areas in which additional care must be taken in the placement of structures to avoid potential damage to habitat. Flood prone areas along the Anchor River and the portion of the Kenai River within the Cooper Landing area were surveyed and nine permanent vertical control survey benchmark stations with detailed location descriptions were physically placed for each of the identified project areas.



Stream Channel and Elevation Modeling in the Seward Bear Creek Flood Service Area

This project acquired tools and data and developed modeling of stream channels, channel migration zones, flood prone infrastructure, natural features and base elevations within certain watershed sections of the Seward Bear Creek Flood Service Area (SBCFSA). The project communicates risk and landscape evolution (Geomorphology) beyond a simple one-dimensional flood model used by FEMA's National Flood Insurance Program. To accomplish this, channel migration zones within the SBCFSA were identified. Flood prone infrastructure was documented and Bed Load Transport was quantified in relation to Flood Flow. Using the high resolution topographic data, various stages of flood flow have been incorporated into the various high resolution topographic datasets and illustrate channel and flood changes over time to the decision makers and the general public. The following was accomplished through this project:

- 32 square miles of LiDAR derived digital elevation modeling and digital terrain modeling for use and analysis through GIS and modeling software.
- Stream Channel Change Detection Illustrate channel and flood changes over time on 5 streams and 20 miles of channel in the study area.
- Acquisition of a digital photometric system to allow for in-house analysis of stream channels pre and post flood events.
- Analysis of existing paired ortho-photography of stream channels pre-1985, post-1985 and post 1996 flood events.

Protecting Flood Prone Alluvial Areas in the Seward Bear Creek Flood Service Area

This project provides the preliminary scoping and feasibility study for determining the development potential of a 900-acre upland feature that is considered one of the most likely areas to support relocation of existing human activities occurring in flood prone alluvial and wetland areas around Seward. The study project pays special attention to the positive impact of removing septic systems from the floodways and floodplains to mitigate damage to salmon habitat. Removal/ relocation of private development from the alluvium allows for improved watershed management and reclamation of coastal areas. This project explored the suitability of Blueberry Hill to accept a shift of private development out of the alluvium.

The project considered potential primary access, secondary routes, community water & sewer systems, and development density in relation to localized topography, soils, bed rock, and natural hazards. Analyses of secondary considerations such as available borrow types and permitting requirements was included in the project.



Ortho-rectified Imagery and LiDAR of the Matanuska-Susitna Borough Coastal

CIAP funds were used to cover the costs of acquisition of high quality 1-meter, or better, pixel resolution ortho-rectified imagery and/or LiDAR elevation data of the higher developed regions of the coastal zone within the Matanuska-Susitna Borough. Approximately 1510 square miles were covered through CIAP funds. Additional funding from the Matanuska-Susitna Borough, the U.S. Geological Survey, the U.S. Army Corps of Engineers (an additional \$1.8 million in funding) was allocated to the project, which amounts to about 2770 square miles of coverage.

City and Borough of Juneau Habitat Mapping and Analysis Project

The City and Borough of Juneau (CBJ) acquired natural color and infrared aerial photography to map streams and wetlands in areas with the highest potential for development. A combination of color and infrared aerial photography was the most efficient way to acquire information on wetlands and streams over large areas, and to map these areas at the level of individual property boundaries. In Phase Two, the wetland and stream mapping efforts utilized separate methods to address the specific issues associated with each habitat type.

- Stream mapping: For the stream mapping effort, CBJ staff worked closely with the Alaska Department of Fish and Game (ADF&G) to mark the salmon-bearing limits of these streams to determine exactly where the 50-foot no-development setback applies. ADF&G has formally supported this project. The CBJ worked through the formal approval process with the local Planning Commission and Assembly to adopt these new maps into the CBJ Land Use Code. This is an essential step to ensure that the stream maps may be legally used for enforcement of the setback.
- Wetland mapping: For the wetland mapping effort, CBJ, in cooperation with an inter-agency task force, determined the most appropriate methodology for wetland scientific analysis. This is an important step because in order for the project to be acceptable to permitting agencies it must be valid according to current science. After the methodology was determined, CBJ hired a consultant to do extensive, “on-the-ground” field analysis of the wetland parcels identified through aerial photography to determine the specific functions of identified wetland units. This functional analysis was used to rank high-value (Category A and B) and low-value (Category C and D) wetlands. This followed the highly-regarded categorization approach used in the original 1992 management plan. CBJ worked through the formal approval process with the Planning Commission and Assembly to adopt these wetland maps with categories and supporting functional analysis into the CBJ Land Use Code, as with the stream maps.



Kodiak Island Borough Mapping of Coastal and Marine Resources:

This project accomplished the following:

- Maps were converted in the revised Kodiak Island Borough Coastal Management Plan into shape files, which were added to the borough's GIS and subsequently published online along with the narrative plan information.
- A large format borough wide map was created for public display at borough offices. The maps include coastal resource information on all communities and shoreline areas of the borough.
- A large format color map was created for each one of the five incorporated communities within the Kodiak Island Borough for display at the city hall of each respective community.
- Coastal and marine resources were integrated as a layer of information contained in the KIB GIS, which made the information available to the public via the Internet through the borough's web pages.

ShoreZone Mapping Project

ShoreZone is a coastal habitat mapping and classification system in which georeferenced aerial imagery is collected specifically for the interpretation and integration of geological and biological features of the intertidal zone and nearshore environment.

In this project, research was conducted on biological resources and geological features of the Alaska shoreline using the ShoreZone Inventory methodology pioneered by Coastal and Ocean Resources, Inc. (CORI), of Sidney, British Columbia. ShoreZone inventory of a designated shoreline is conducted in two phases:

- The first phase, imaging, involved aircraft and on-board science crew and was conducted in a very brief window of time determined by hours of daylight, tide cycle, and weather.
- The second phase, interpretation (the mapping component, with associated production of spatial and other data) was conducted over a period of months.

To date, approximately 50% of the 44,500 miles of Alaskan coastline has been flown and imaged. The ultimate goal is to develop ShoreZone imagery and mapping of the entire Alaska coastline. CIAP funding was used to image and map at least 8,000 kilometers (km) of coastline not yet completed.

Research and practical applications of ShoreZone coastal mapping data and imagery include: natural resource planning and environmental hazard mitigation (e.g. by resource managers in evaluating project impacts); linking habitat use and life history strategy of nearshore fish and other intertidal organisms; habitat capability modeling (e.g. predicting the spread of invasive species); providing regional framework for site-specific shore station surveys; and public use for recreation, education, and outreach, and as a tool for developers during the project planning phase.

Other applications include using ShoreZone to model areas sensitive to climate change, and as a tool to



support future oil remediation efforts and oil spill response planning, as well as restoration activities, such as possible herring intervention programs like moving spawn to rearing areas.

Geohazard Evaluation and Geologic Mapping for Coastal Communities

The Division of Geological & Geophysical Surveys (DGGS) collected the necessary field data to produce and publish surficial and engineering-geologic/hazards maps of Alaskan coastal communities, prioritized in consultation with the Alaska Division of Community and Regional Affairs, Alaska Coastal Management Program staff, the U.S. Army Corps of Engineers (COE), the Denali Commission, and affected coastal districts. The maps identified local natural hazards that must be considered in the siting, design, construction, and operations of development projects to ensure protection of the coastal area.

Mapping was completed at local and/or regional scales needed to address specific local problems and to understand and evaluate the larger geologic context of the area. The engineering- geologic/hazards maps were published in GIS format with standard metadata and will delineate areas where natural hazards such as erosion, slope instability, active faults, flooding, and earthquake effects should be considered at a more detailed level to fully evaluate construction risk and to ensure that the coastal areas are not damaged by planned and proposed development. Project work was coordinated with current U.S. Geological Survey coastal studies to ensure there is no duplication of effort.

Community Mapping for Southeast Alaska

Through this project, DCRA provided community profile maps for small coastal communities in southeast Alaska that have not had new maps in more than twenty years. The following communities are anticipated to be included in this project: Tenakee Springs, Pelican, Gustavus, Port Protection, Whale Pass, Naukati Bay, Hollis, Coffman Cove, Thorne Bay, Hyder, Metlakatla, and Port Alexander.



ALASKA STATEWIDE DIGITAL MAPPING INITIATIVE

The primary goal of the Alaska Statewide Digital Mapping Initiative (SDMI) is to acquire new and better maps statewide for Alaska and to make existing map products more easily available.

Alaska is the last state in the union to procure a modern statewide digital base map system of uniform resolution and accuracy in both a geographic and procedural context that offers contiguous statewide coverage. Such a map would support data sharing and the accurate analysis of the data thereby promoting intelligent resource allocations and planning for the benefit of all Alaskans. In limited stove-piped departmental roles

Alaska has demonstrated it can deploy advanced Geospatial Information Systems (GIS). However, it is the undeniable absence of a useful statewide base map that inhibits Alaska's full migration to a more efficient and cost effective method of business. The fact is: Alaska has realized a small fraction of its potential efficiencies and cost savings in this regard. Often times, geospatial data is acquired and utilized on a project driven, departmentally specific basis, which does not benefit the much broader user group. Currently, data exists in departmental silos and is often duplicated and when shared among users it is done so on a limited basis. Therefore, users often end up repurchasing and recreating similar data needs. Furthermore, value added products and services that could and should be derived from a single source statewide base map in a digital or paper context are not produced and their constructive effects upon governmental efficiency and public safety go largely unrealized.

Alaska does not have an adequate digital base map. The SDMI seeks to remedy this situation. The SDMI program will ultimately provide an accurate, current, seamless, statewide base map, made available over the internet, through open standards, free of charge to all. The target basemap is a statewide ortho-image, controlled by an appropriately scaled elevation model and ground control as required.

The SDMI's activities include: planning, public access, data acquisition and stakeholder relations. The SDMI is a cooperative state program endorsed by the Governor and implemented by the University of Alaska (UA) and State of Alaska Departments of Natural Resources (DNR); Military and Veteran's Affairs (DMVA); Public Transportation and Public Facility (DOTPF); Environmental Conservation (DEC); Fish and Game (DFG); and Commerce, Community, and Economic Development (DCCED).

The SDMI works in partnership with Federal, local, industry and non-profit partners. To date, that partnership has come primarily in the form of the contribution of imagery and elevation data for



Alaska valued at more than \$10 million. Please see the list of data contributors for a more detailed look at our generous partners.

The SDMI has engaged stakeholders extensively. A comprehensive user survey was executed in 200X with very broad community participation. Two, multi-day workshops were attended by a diverse and representative group of stakeholders. More details can be found at these event and documents pages:

- User Survey (180+ respondents)
- Alaska DEM Workshop (100+ attendees)
- Alaska Ortho-Imagery Workshop (60+ attendees)
- SDMI Planning Activities

The SDMI hired a consulting team from HDR Alaska, Inc and I-cubed to perform planning activities to inform Alaska statewide mapping. Their analysis resulted in publication of the following reports:

- User Survey Report
- Ground Control Report
- Existing High-Resolution Imagery and DEM data for Alaska Report
- Final Summary Recommendations Report

GRAVITY FOR THE REDEFINITION OF THE AMERICAN VERTICAL DATUM (GRAV-D)

GRAV-D is a proposal by the National Geodetic Survey to re-define the vertical datum of the US by 2021. The gravity-based vertical datum resulting from this project will be accurate at the 2 cm level for much of the country. The proposal is official policy for NGS and is included in the NGS 10 year plan. The project is currently underway and actively collecting gravity data across the United States and its holdings.

The GRAV-D project consists of three major efforts:

A high-resolution "snapshot" of gravity in the US: This is a predominantly airborne campaign, to be accomplished around 2017 and at a cost of ~39 Million dollars. The highest priority targets are: Alaska, Puerto Rico and the Virgin Islands, the Gulf Coast, the Great Lakes, and Hawaii (some portions of which have already been completed). The coastline of the continental US and the American island holdings are also of high priority.

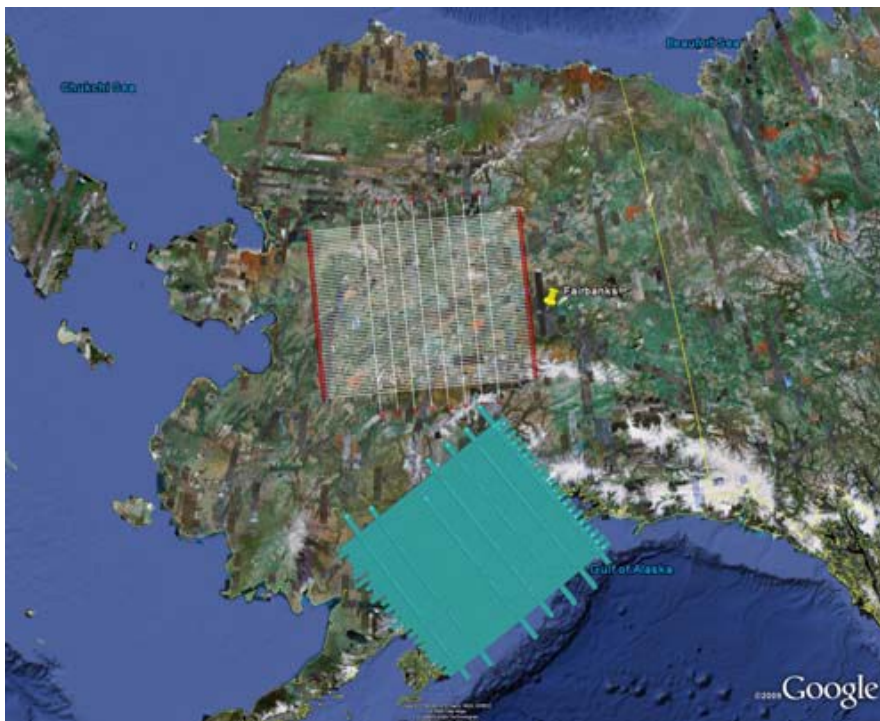
A low-resolution "movie" of gravity changes: This is primarily a terrestrial campaign and will mostly encompass episodic re-visits of absolute gravity sites, attempting to monitor geographically dependent changes to gravity over time. This will allow time dependent geoid modeling and thus time dependent orthometric height monitoring through GNSS technology.



Regional partnership surveys: NGS seeks to collaborate with local (governmental, commercial, and academic) partners throughout the GRAV-D project. Partners that are willing to support airborne or terrestrial surveys or to monitor local variations in the gravity field are a critical component of GRAV-D.

NGS Gravity for the Redefinition of the American Vertical Datum (GRAV-D) airborne team transitioned to Anchorage, AK from Fairbanks for its final week (ending November 15) for the 2010 calendar year. The Department of the Interiors Bureau of Land Management aircraft employed by the team was in scheduled maintenance in Anchorage, and by moving operations to Anchorage; NGS was able to capitalize on additional flight days. After New Years, the GRAV-D team will continue operations in January and February from McClellan Field in Sacramento, CA with survey work in central and northern California until Alaska warms up sufficiently to resume the GRAV-D airborne effort there.

Figure 8: GRAV-D Surveys Flown in Alaska





HAZARD ASSESSMENT IN ALASKA

Alaska Baseline Erosion Assessment

The U.S. Army Corps of Engineers, Alaska District (USACE), conducted a Baseline Erosion Assessment (BEA) to coordinate, plan, and prioritize appropriate responses to erosion throughout Alaska. The study, begun in April 2005 and completed in March 2009, was specifically funded by the U.S. Congress. After conducting the study, the Corps prepared a technical report intended to help Federal, State, Tribal, and local stakeholders to develop strategies and plans for addressing erosion issues in Alaska.

Through a process of stakeholder meetings, review of previous reports, and extensive correspondence with communities,¹ 178 Alaska communities were found to have reported erosion problems. After subsequent investigation, the Corps designated 26 communities “Priority Action Communities”—indicating that they should be considered for immediate action by either initiating an evaluation of potential solutions or continuing with ongoing efforts to manage erosion. See Table 25, below). Sixty-nine communities, where erosion problems are present but not significant enough to require immediate action, were designated “Monitor Conditions Communities.” (See Table 26, next page). Eighty-three communities where minimal erosion-related damages were reported or would not be expected in the foreseeable future were designated “Minimal Erosion Communities.”

Table 22: BEA Priority Action Communities

Akiak	Emmonak*	Newtok
Alakanuk	Golovin	Nunapitchuk
Barrow	Huslia	Port Heiden
Chefornak	Kivalina*	Saint Michael
Chevak	Kotlik	Selawik
Clark’s Point	Kwigillingok	Shaktoolik
Cordova/Eyak	Lime Village	Shishmaref*
Deering	McGrath	Unalakleet*
Dillingham	Napakiak	

**NFIP-participating communities*

Each Priority Action Community has reported serious erosion that is threatening the viability of the community, or, in some cases, significant resources are being expended to minimize those threats. The erosion issues in these communities warrant immediate and substantial Federal, State, or other intervention. In some cases, action is needed to continue funding for projects that are underway and funded by Federal, State, Tribal, and/or local entities. For others, it is urgent that a team visit the community to assess erosion issues and needs thoroughly.

¹ The term “community” is meant to include both the town and the federally recognized Tribe located near that town. In instances when the intent is to specifically identify the incorporated town/city/village or the federally recognized Tribe, the distinction is made.



A topic that arose frequently during the BEA study is that flooding is as great a problem as erosion in some communities. The BEA assesses erosion but includes a conclusion that an assessment of flooding issues in Alaska is needed.

Table 23: BEA Monitor Conditions Communities

Alatna	Galena	Noatak
Aleknagik	Gulkana	Nome
Aniaka	Haines	Nuiqsut
Atmautluak	Homer	Old Harbor
Bethel	Hooper Bay	Oscarville
Big Delta	Hughes	Ouzinkie
Brevig Mission	Igiugig	Pile Bay-Williamsport
Buckland	Iliamna	Pilot Point
Butte	Kaktovik	Point Hope
Central Kenai	Kalskaga	Port Graham
Chignik Lagoon	Kipnuk	Russian Mission
Chiniak	Kongiganak	Savoonga
Circle	Kotzebue	Seward
Circle View-Stampede Estates	Koyukuk	Shageluk
Delta Junction	Kwethluka	Soldotna
Diomedes	Levelock	South Naknek
Eagle Lower	Lower Kalskag	Sutton-Alpine
Eek	McCarthy	Tuntutuliaka
Egegik	Mekoryuk	Tununak
Elim	Nanwalek	Upper Kalskaga
Evansville	Nelson Lagoon	Valdez
False Pass	Nenana	Venetie
Fort Yukon	Nightmute	Wales



A Minimal Erosion Community has erosion impacts that are not considered serious and are not affecting the viability of the community. At this time, erosion does not appear to warrant Federal, State, or other intervention.

Table 24: BEA Minimal Erosion Communities

Akhiok	Gustavus	Perryville
Akiachak	Holy Cross	Point Lay
Allakaket	Hyder	Port Alsworth
Ambler	Ivanof Bay	Port Lions
Anchor Point	Juneau-Douglas	Portage
Angoon	Kaltag	Red Devil
Anvik	Karluk	Saint Paul
Bettles	Kiana	Salcha
Birch Creek	King Cove	Sand Point
Cantwell	King Island	Sitka
Chalkyitsik	Kokhanok	Skagway
Chignik Bay	Koyuk	Skwentna
Chignik Lake	Larsen Bay	Sleetmute
Chistochina	Manley Hot Springs	Stebbins
Chitna	Mary's Igloo	Susitna
Chuathbaluk	Metlakatla	Talkeetna
Coldfoot	Municipality of Anchorage	Tazlina
Copper Center	Napaskiak	Teller
Council	New Stuyahok	Togiak
Crooked Creek	Ninilchik	Toksook Bay
Ekuk	Nondalton	Ugashik
Ekwok	Noorvik	Upper Chena
Fairbanks	Northway	Wainwright
Fox	Northway Village	Wasilla
Gakona	Nulato	Willow
Gambell	Nunam Iqua	Wiseman
Girdwood	Palmer	Yakutat
Grayling	Pedro Bay	



HAZARD IMPACT ASSESSMENTS - ALASKA CLIMATE CHANGE IMPACT MITIGATION PROGRAM (ACCIMP)

The ACCIMP provides grants for Hazard Impact Assessments to address the impacts of erosion, flooding, thawing permafrost and other impacts of climate change. Hazard Impact Assessment (HIA) Grants provide funding to communities to hire a contractor to identify, define, assess impacts to the community. The HIA provides recommendations to the community for the next steps to be taken to address the hazard impacts.

IMPERILED COMMUNITIES WATER RESOURCES ANALYSIS

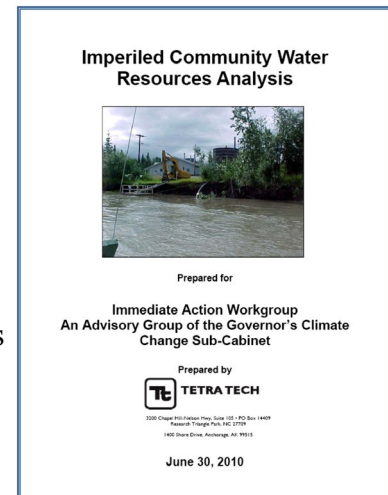
In 2009, the Immediate Action Work Group of the Governor's Subcabinet on Climate Change (IAWG) identified six critically imperiled Alaskan communities along with recommended immediate actions to assist these communities.

During this same time period, a statewide baseline erosion assessment was also completed by the Alaska District of the U.S. Army Corps of Engineers which indicated that an additional 17 communities deserved priority action status with respect to coastal and riverine erosion threats.

The Imperiled Communities Water Resources Analysis endeavored to assess and evaluate the climate-related risks to water resources and water/wastewater infrastructure, as needed to prioritize imperiled communities that need assistance. The analysis involved a screening-level assessment of potentially imperiled communities based upon documented and/or anecdotal climate-related threats to water resources and water/wastewater infrastructure, such as flooding and saltwater intrusion, loss of surface water supplies (permafrost lakes draining), erosion of critical infrastructure or surface water resources leading to sedimentation of potable water sources, and other potential impacts.

The analysis included an initial cursory evaluation of the climate-related risks (primarily flooding and erosion) associated with 214 communities eligible for funding by the Alaska Department of Environmental Conservation (ADEC) Village Safe Water (VSW) Program.

From this broad master list of communities, 26 communities were initially identified and designated as the study group. An additional 44 communities were also identified as having potential climate risks to water resources and water/wastewater infrastructure, but either initially had lower perceived threats or required additional information to more confidently assess those risks. The analysis was limited to second class cities and unincorporated villages managed by tribal councils and did not extend to first class cities.





Readily available information for the study group was collected using a combination of professional staff interviews, and reviews of online databases, written reports, community maps, and other information.

Relevant information for each study group community was summarized in community profiles that document the climate-related risks to water resources and water/wastewater infrastructure across the following risk factors, which were loosely based on established IAWG community ranking methodology:

Based on this analysis, the following study group of 25 communities was identified as likely to face near-term climate change related impacts to their water and wastewater infrastructure.

Alakanuk	Emmonak	Quinhagak
Aniak	Fort Yukon	Saint Michael
Atmautlauk	Golovin	Selawik
Brevig Mission	Gulkana	Stebbins
Buckland	Hughes	Teller
Chalkyitsik	Huslia	Venetie
Chignik Lagoon	McGrath	Wales
Deering	Nelson Lagoon	
Diomedede	Noatak	

The analysis was intended to serve as an initial step in identifying and prioritizing at-risk communities, rather than a definitive assessment. These initial community-specific characterizations should be refined through an iterative process where necessary additional information is collected and reviewed, and vetted with more analysis.

Recommendations are provided to help collect better data, measure local climate impacts, refine assessments, prioritize communities for action, and develop mitigation plans, where applicable. Specific recommendations include:

1. Supplementing this analysis with more detailed analysis
2. Collecting additional hydrologic data
3. Increasing permafrost monitoring
4. Adopting prevention and adaptation strategies for managing water and wastewater assets
5. Mitigating landfill and tank farm risk
6. Implementing relevant Adaption Advisory Group recommendations to the Governor's Climate Change Subcabinet



RESILIENCE PLANNING IN ALASKA

Community Planning Grants - Alaska Climate Change Impact Mitigation Program

In 2007, the State of Alaska Climate Change Sub Cabinet was established in the Alaska Governor's Office. Soon thereafter, a working group of this

In response to this issue, in 2008, Alaska's Twenty Fifth Legislature established the Alaska Climate Change Impact Mitigation Program (ACCIMP) with funding to address the immediate planning needs of communities imminently threatened by climate change-related impacts such as erosion, flooding, storm surge, and thawing permafrost. The ACCIMP is administered by the Alaska Department of Commerce, Community, and Economic Development, Division of Community & Regional Affairs (DCRA).

The program initially directs the majority of grant funds at specific communities identified as imminently threatened by the Governor's Subcabinet on Climate Change, Immediate Action Workgroup (IAW). The majority of Alaska Climate Change Impact Mitigation Program (ACCIMP) funds are directed to specific communities identified as imminently threatened by the Governor's Subcabinet on Climate Change, Immediate Action Workgroup (IAW). These communities are Shishmaref, Kivalina, Newtok, Koyukuk, Unalakleet and Shaktoolik.

The ACCIMP provides non-competitive funding to the six imminently threatened communities for Community Planning Grants to address the recommendations for immediate actions made by the IAW in its Recommendations Report to the Governor's Subcabinet on Climate Change, April 17, 2008. Based on the scope of the community planning project, communities are eligible for grants of up to \$150,000.

Alaska Community Coastal Protection Project

The Alaska Community Coastal Protection Project was carried out by DCRA through a grant from the Alaska Coastal Impact Assistance Program. The project focused on Project focuses on three of the most imminently threatened villages in Western Alaska: the communities of Kivalina, Shaktoolik and Shishmaref. The objective of the project has been to increase community resilience and sustainability to the impacts of natural hazards threatening these communities while protecting the natural coastal environment. The project is based on the premise that careful planning, agency collaboration and strong community leadership are essential to successfully addressing the needs of imperiled communities.

Community resilience is increased through three measures:

- **Interagency Collaborative Support Structure:** Using a collaborative model similar to the Newtok Planning Group, DCRA has establish interagency planning work groups for each the three communities. community with the implementation of the strategic actions from each plan.
- **Local Capacity Building:** Funding was provided to each community to establish a full-time community coordinator (two years) who served as an advocate for funding through grants and other means to implement needed evaluations and action plans.



REFERENCES

- Childers, V.A., D.R. Roman, D.A. Smith, and T.M. Diehl. *GRAV-D: NGS Gravity for the Re-definition of the American Vertical Datum Project*. Proc. of First Annual Workshop on Monitoring North American Geoid Change, Boulder, Colorado. U.S. National Geodetic Survey.
www.ngs.noaa.gov/grav-d/2009Workshop/Presentations/Childers_US_NGS_GRAV-D.ppt
- DCRA. 2009. *Rural Population Report: The Trends are Changing*. State of Alaska Department of Commerce, Community, and Economic Development, Division of Community and Regional Affairs (DCRA): Anchorage, AK.
- DCRA. 2012. *Alaska Planning Commission Handbook*. State of Alaska Department of Commerce, Community, and Economic Development, Division of Community and Regional Affairs (DCRA): Anchorage, Alaska.
- Denali Commission. 2007. *Working Together for a Better Alaska: Annual Report 2007*. Denali Commission, an Independent Federal Government Agency.
- DHSEM. 2007. *Alaska: All-Hazard Risk Mitigation Plan*. State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management (DHSEM).
- FEMA. 2007. *FEMA's Flood Map Modernization – Preparing for FY09 and Beyond: Integrated Flood Data Update, Risk Assessment, and Mitigation Planning* (Draft Concept Paper). United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2008. *FEMA's Risk MAP Strategy – Integrating Mapping, Assessment, and Mitigation Planning* (Draft Strategy). United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2009. *Risk MAP FY09 Flood Mapping Production Plan*. United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2009. *Risk Mapping, Assessment, and Planning (Risk MAP) Multi-Year Plan: Fiscal Years 2010 – 2014* (Fiscal Year 2009 Report to Congress). United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.



- FEMA. 2009. Risk Mapping, Assessment, and Planning (Risk MAP): Fiscal Year 2009 Flood Mapping Production Plan (Version 1.0). United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2011. Discovery Report, FEMA Region X, Cordova Coastal, Alaska. States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2011. Discovery Report, FEMA Region X, Kenai Peninsula Borough, Alaska. United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2011. Discovery Report, FEMA Region X, Kotzebue, Alaska. United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- FEMA. 2011. Discovery Report, FEMA Region X, Valdez Project Area, Alaska. United States Department of Homeland Security, Federal Emergency Management Agency (FEMA): Washington, DC.
- Flora, Cornelia and Jan Flora. 1994. “Community Sustainability and Forms of Capital.” Department of Sociology, Iowa State University, Ames, IA. Unpublished manuscript.
- GAO. 2003. Alaska Native Villages: Most are Affected by Flooding and Erosion, but Few Qualify for Federal Assistance (GAO-04-142). U. S. Government Accountability Office.
- GAO. 2009. Alaska Native Villages: Limited Progress Has Been Made on Relocating Villages Threatened by Flooding and Erosion (GAO-09-551). U. S. Government Accountability Office.
- Immediate Action Work Group, Recommendations *Report to the Governor’s Subcabinet on Climate Change*, Final Report, April 17, 2008. Anchorage, Alaska.
- Langon, Steve. 2002. The Native People of Alaska: Traditional Living in a Northern Land. Anchorage, AK: Greatland Graphics.
- Martin, Dan. Modernization of the National Spatial Reference System. Proc. of 2011 Massachusetts Association of Land Surveyors & Civil Engineers, Hyannis, Massachusetts.
www.aot.state.vt.us/geodetic/Advisor/Advisordoc/MALSCE_NSRS_10.pdf
- Maune, David F., Ph.D., Dewberry. Digital Elevation Model (DEM) Data for the Alaska Statewide Digital Mapping Initiative (SDMI). Proc. of National Geospatial Advisory Committee Meeting,



October 15, 2008, Shepherdstown, West Virginia. The Federal Geographic Data Committee.
www.fgdc.gov/ngac/meetings/october-2008/dem-data-for-alaska.ppt

Miller, Christy, Steve Barber, and Elizabeth Benson. 2002. State of Alaska: Statewide Flood Hazard Map Modernization Plan. State of Alaska Department of Community and Economic Development, Division of Community and Business Development: Anchorage, AK.

Miller, Christy. 2008. Alaska's Flood Map Modernization Business Plan. State of Alaska Department of Community and Economic Development, Division of Community Advocacy: Anchorage, AK.

Minkel, David. National Geodetic Survey, NOAA. Upcoming Changes to the National Spatial Reference System. Proc. of American Congress on Surveying & Mapping Annual Conference, July 7-12, 2011, San Diego, California.

Morehouse, Thomas, Gerald McBeath, and Linda Leask. 1984. Alaska's Urban and Rural Governments. Lanham, MD: University Press of America.

Oppegard, Erik. JOA Surveys. "NOAA's National Height Modernization and GRAV-D: Putting It All Together." Problems with the Vertical Reference Frame in Alaska. Proc. of Alaska Surveying and Mapping Conference 2010, Anchorage, Alaska.
www.ngs.noaa.gov/heightmod/AK20107ProbsWVerticalRefFrameIn0AKOppegard.ppt

Research Needs Work Group, 2009. *Research Needs Work Group Recommendations on Research Needs Necessary to Implement an Alaska Climate Change Strategy*. http://climatechange.alaska.gov/docs/rn_12jun09_dfrpt.pdf

Single Community Districts City and Borough of Juneau, City and Borough of Sitka, City and Borough of Wrangell, City and Borough of Yakutat, Angoon, Bethel, Cordova, Craig, Hoonah, Hydaburg, Kake, Klawock, Nome, Pelican, Petersburg, St Paul, Thorne Bay, Valdez, Whittier, Haines Borough, Municipality of Anchorage, Municipality of Skagway, Bristol Bay Borough.

State of Alaska. Department of Commerce, Community, and Economic Development, Division of Community and Regional Affairs. "Community Mapping", February 2009 (Pamphlet.)

State of Alaska. Department of Military and Veteran Affairs, Division of Homeland Security & Emergency Management, Oct. 2007. Web.

U.S. Army Corps of Engineers, Alaska District, Civil Works Floodplain Management Services Web



Site. Web. www.poa.usace.army.mil/About/Offices/Engineering/FloodplainManagement.aspx

U.S. Department of Homeland Security. Federal Emergency Management Agency, “The National Flood Insurance Program” 14-May-2010 500 C Street SW, Washington, D.C. 20472 www.fema.gov/national-flood-insurance-program • www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/map-modernization